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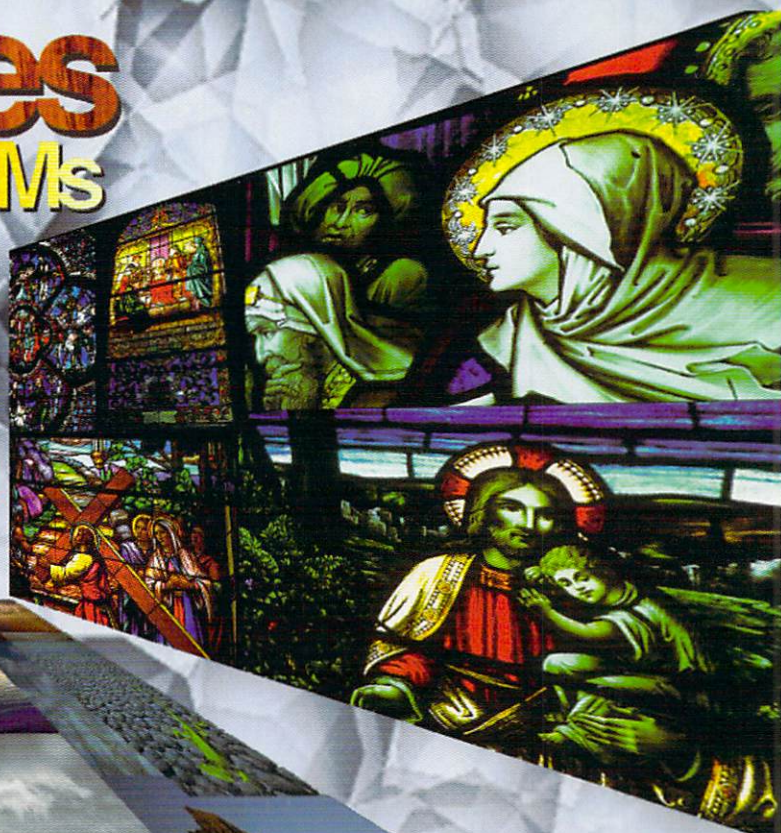
COMPUTING™

Volume 11 No. 9 September 1996
US \$3.95 Canada \$5.95

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To: Amazing Computing/Amiga Readers

From: David A. Ziembicki
CEO-QuikPak Corporation

Re: Amiga Update

I am happy to announce that the A1200 NTSC is back. We began shipping on schedule and have sold out of our first run. More are on the way and should be available in mid-August. I have also seen several impressive load-and-go Web browsers and believe that the A1200 will emerge as a viable Internet machine. Check with your dealer for the latest delivery information on the new batch.

QuikPak, along with several of the third party developers and through the efforts of Keith Cagle of Virtual Reality Productions, has made arrangements for 3 A4000T's (one with the new 68060 50Mhz accelerator installed) to be available for use at the 1996 Summer Olympic Games in Atlanta. These towers are fully equipped with Video Toasters and Flyers provided by New Tek, software from various sources, and are available in the journalist's video suite for demonstration and use by videographers (as well as the athletes) from around the world. We believe that the Olympics will provide an unparalleled showcase for the Amiga. When the Games are completed, video footage, processed by the Amiga, should become available from Keith at Virtual Reality (phone 770-591-9426).

We are also announcing (as mentioned above) the availability of the 68060 50 Mhz accelerator. This product dramatically improves the performance of the A4000T along with allowing for high speed EDO RAM expansion of up to 128MB! Contact your local Amiga dealer for a demo of this lightning fast accessory.

Last, but certainly not least, we are following the ESCOM, Amiga Technologies, VIScorp developments almost hourly. At last check, reports indicate that the definitive agreement is in place for VIScorp's purchase of Amiga Technologies, and all needed approvals from ESCOM's liquidator and banks have been secured, with final deal closing due in mid-August. We all hope that this chapter of the Amiga story will now be closed. Stay tuned for new developments.

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COMPUTING



The Amiga Sale #2

ESCOM Dies The Amiga Lives!

Undaunted by a perilous ESCOM bankruptcy, VIScorp executives flew to Germany and pulled Amiga Technologies from the grip of the ESCOM trustees and clearly saved the Amiga platform from certain death.

Now hear the behind the scene story from the two main characters, Petro Tyschtschenko of the soon-to-be dismantled Amiga Technologies and Bill Buck of the newly charged Amiga oriented VIScorp. —Page 42.



GOLD FROM 1990?

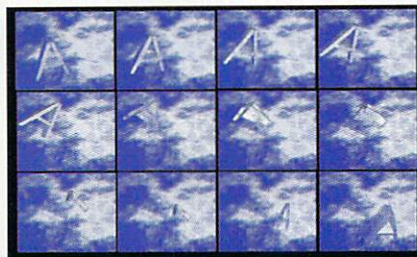
What does this array of equipment from 1990 have to do with current events? The Amiga's influence is continually being felt. Page—4



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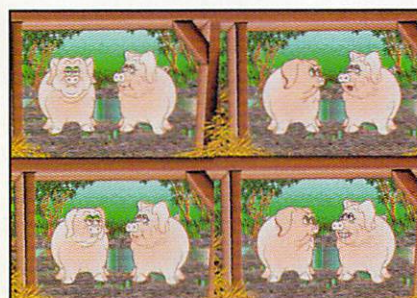
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9 New Products

& Other neat stuff

New Amiga business software, a new Aminet collection, and the Amiga is seen working at the Olympics!

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by R. Shamms Mortier

There is a world of possibilities in every graphic CD-ROM.

20 Cinema4D Animation Tutorial: Part 1

by R. Shamms Mortier

Although AC will stick to the basics, don't think that Cinema4D is capable of anything less than a professional application. Cinema4D is capable of Keyframe, path, hierarchical, inverse kinematic, and special FX (explosions, melts, and more).

27 On Line

by Rob Hays

Frustrated with your attempt to connect to the Web? Try a trip to Miami!

32 Web Typesetting, Part 6: Reading Form Data

by Ramdy Finch

Catching user information from your web site.

36 This Old Workbench, Part 3 Compression on the Amiga.

by Dave Matthews

Create needed space on your Amiga on-the-fly.

48 Make Do

With What You Got

by R. Shamms Mortier

In art or in life, it is not always how much you have, but what you do with it.

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Editorial Content

Escom dies and VISCORP saves the Amiga, while we take a minute to remember what an Olympic performer the Amiga is!

Last month I bemoaned the fact that this is summer and the living should be easy. Well folks, as the old saying goes, the hits just keep on coming.

VISCORP Rescues the Amiga

Anyone who has been following this column knows that the future of the Amiga has been an up hill battle for some time. The latest engagement in this war was successfully fought by VISCORP executives as they rescued the Amiga from the dying grasp of ESCOM.

It appears that ESCOM was not completely accurate with their losses and the figure continued to grow with each new calculation. The immediate remedy for this situation in Germany is to place the company in bankruptcy and see what can be salvaged.

This occurred only days after VISCORP had finally come to an agreement with the management of ESCOM on the buy out of Amiga Technologies. VISCORP believed that, since they had a deal, the deal should go through. But to make that happen, VISCORP executives were forced to board a plane to Germany and spend the next several weeks chasing the matter through the hands of ESCOM, its banks, and the trustees.

To many Amiga hands, this sounds way too familiar. With the long drawn out fight over Commodore's assets still fresh in all of our minds, it does not take a soothsayer to know that if the situation was to repeat itself, the Amiga's days would be numbered. But, VISCORP was aware of the problems too and used the leverage of the completed deal with ESCOM to get the trustees to agree to a new deal. As of July 19, the Amiga belongs to VISCORP. VISCORP will rename Amiga Technologies and continue production and development.

Recently, I had an opportunity to speak with VISCORP's CEO, Bill Buck, concerning the problems and promises of the new venture. Mr. Buck was extremely enthusiastic about the opportunities that the Amiga had. If enthusiasm is a guide, then we have a great chance to see a true Amiga resurgence under this new company.

OK, you've heard it all before? Well, take a look at the article on page 42 of this issue and see if you don't begin to feel the shiver of excitement.



Georgia Tech's Amiga 2500 in 1990.

Olympic Glory

As this issue is flying to the press, Atlanta is playing host to the world with the 1996 Olympic Games. I was surprised recently when I spoke with VISCORP and Amiga Technologies executives and they had no knowledge of the importance the Amiga had played in getting the games to Atlanta.

In the October, 1990 issue of Amazing Computing there was a small two page article that showed an Amiga 2500 as the central unit in a high-tech multimedia multi-platform presentation system. With laser discs, MIDI sound, digitized speech and more, Atlanta was able to tell the world just why they would be the best choice.

As a crowning touch, the International Olympic Committee announced Atlanta the winner on the day that edition of AC shipped. You can read the full article in the October, 1990 issue of AC (back issues are available) or you can see it on our web site at www.pimpub.com.

So, as I watch the Olympic games this Summer, I wonder what they would have been like if Commodore had taken a more forceful position. If the Amiga had been able to capitalize more quickly on its advantages.

I do know that today, we still have a machine capable of doing what was done in 1990 and more. I also know that no other desktop computer has been able to do the same since. And now, once again, we have the beginning of a new opportunity, a new frontier. Exciting, isn't it!

Sincerely,

Don Hicks
Managing Editor

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<http://www.pimpub.com>

Amazing Computing/Amiga™ (ISSN 1053-4547) is published monthly by PIM Publications, Inc., P.O. Box 2140, Fall River, MA 02722-2140, Phone 1-508-678-4200, 1-800-345-3360, and FAX 1-508-675-6002.

U.S. subscription rate is \$29.95 for 12 issues. Subscriptions outside the U.S. are as follows: Canada & Mexico \$38.95 (U.S. funds) one year only; Foreign Surface \$49.97. All payments must be in U.S. funds on a U.S. bank. Due to erratic postal changes, all foreign rates are one-year only.

Second-Class and Periodical Postage paid at Fall River, MA 02722 and additional mailing offices.

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Distributed in the U.S. & Canada by
International Periodical Distributors
674 Via de la Valle, Ste 204, Solana Beach, CA
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FEEDBACK

Dear AC,

I have been purchasing your magazine for about seven months now, ever since its discovery by me in a local bookstore, Barnes and Noble. Your magazine is consistently the most informative and professional of the limited array of Amiga publications available.

I have also written letters to VISCORP and Phase Five Digital products, essentially begging for some decent advertising and marketing here in the States. Also, since I live in Salt Lake City, a city of almost a million souls, an Amiga dealer who actually stocks Amigas, as well as software newer than 1992, would be helpful. When I ask friendly dealers about the Amiga, they lament that, despite the Amiga's superior OS and other capabilities, there isn't enough demand for the Amiga because there's no advertising, and at any rate there's no dealer support network. If they sell Amigas, they are on their own. Then they try to sell me a nice Pentium with Windoze '95 on it, consuming vast tracts of the 1.3 gig hard drive and seemingly unable to find most of its equipment. But there are 1-800 numbers all over it, and I can get software for it anywhere, including the local grocery store!

I mentioned all this and more in my letters to VISCORP and Phase Five, and I am also hoping for some sort of Windows or Macintosh cross-platform support. No one hates WIN '95 more than I, but in order for a computer to sell in America, it's gotta have compatibility with available Microsoft software. This would also ease the initial shortage of the Amiga-specific, and often superior, software. Oh yes, and a good, active matrix laptop with the Amiga OS and a decent hard drive on it would be great, especially if advertised by Christmas time. I would probably be the first in the Salt Lake valley to buy one, but maybe with some, no MUCH!, advertising, the Amiga could once again be established as a viable, reliable alternative to

what's currently available. I can only hope that the new Amiga owners will follow through on these things and more.

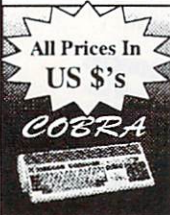
Thanks again for continuing your insightful support of the Amiga and its users. The Apple ads say that 38% of Mac users consider themselves "missionaries for the brand". Amiga users have them beat, as well as we are all "missionaries for our brand". May our machine "Live Long, and Prosper!" Good luck, VISCORP!

Sincerely,
Bolton Peck
Salt Lake City UT

No news could have made the staff of Amazing Computing any happier than the announcement that the sale to VISCORP had gone through. This industry has suffered a great deal (so much so that many of our fellow Amiga users are having bouts of a paranoia) but the rest of the world is still trying to create what the Amiga had ten years ago.

The fact that there are thousands of Pentium programs and millions of places to buy them only means one thing—If you need a Pentium, buy one. But if your needs can only be met with the price, performance, and capabilities of the Amiga, you are now going to have a better than ever opportunity to buy one. While VISCORP is still not saying much about their plans (this issue went to press just days after the final sale) it is apparent that VISCORP's needs and the needs of the Amiga community have a very similar focus.—ED

Please Write to:
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Fall River, MA 02722-2140

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World Wide Web News

GIANT NEWS--Amicom has developed a World Wide Web kit which contains all the software you need to get on the World Wide Web (plus full technical support)! Included are the popular Web browsers Voyager 1.0, AWeb1.2, AMosaic, and more! Includes eight disks plus manual. *Getting on the Web has never been easier!!!*

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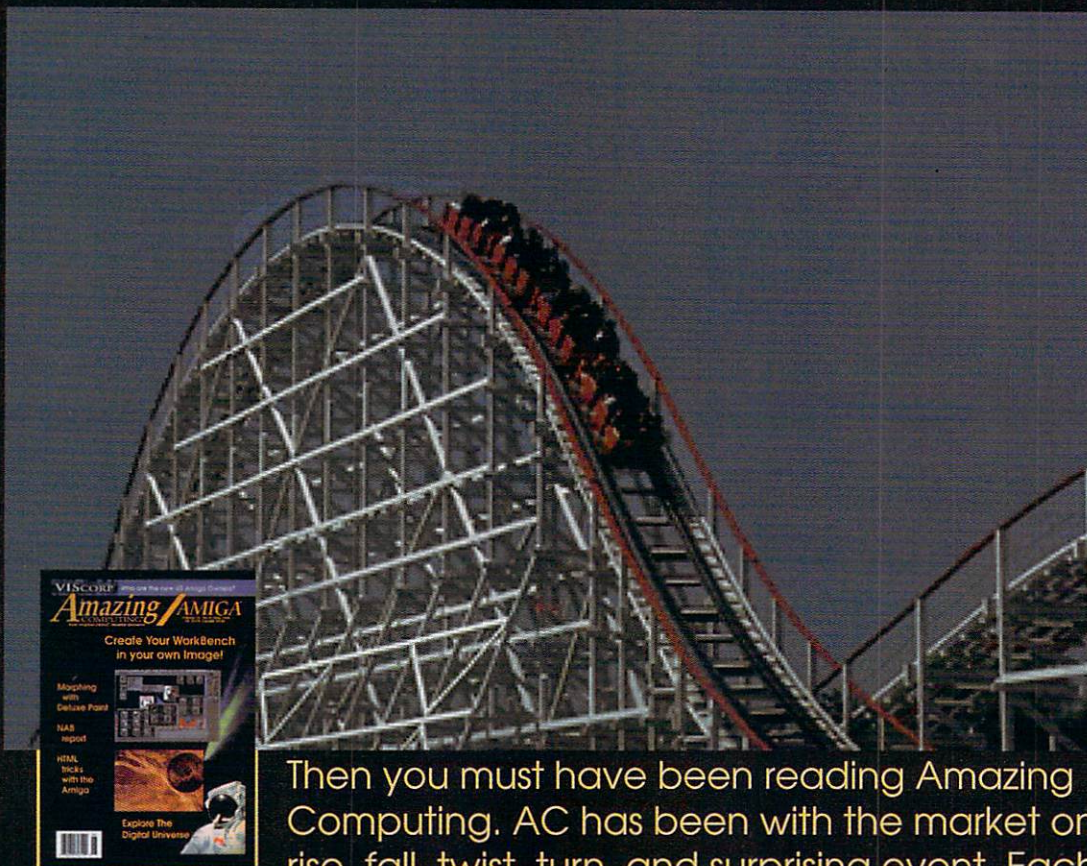
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This ad was produced entirely with Amiga computers, PageStream, and other Amiga software

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New Business Software, a new Aminet collection, and the Amiga is seen working at the Olympics.

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The DRIVE-IN™ is now available in configurations ranging from 7 and 9 bay models, to high end rackmount applications. Suggested retail price for the 7 bay unit is \$499.00. For additional information please contact Tom O'Connor, Desktop Video Systems, 9054 Parkhill, Lenexa, KS 66215. You may also call (913)782-8888 or fax (913)492-6908.

MoneySmart from GRAFICA

Grafica Software has announced the release of MoneySmart v2.0 for the Amiga. MoneySmart is a program designed to help the home user and the small business owner organize his financial matters with ease.

MoneySmart can reduce your involvement with files and directories to a minimum. MoneySmart allows you to write checks, memorize checks, print checks, reconcile your bank statement, edit the categories, budget,

and much more. MoneySmart retails for the reasonable price of \$69.95 and includes the MoneySmart "User Manual" of more than one hundred pages describing in detail every aspect of the program.

MoneySmart's operating system requirements include AmigaDos 2.0 or above, Font Topaz 8, and a Printer Driver for your printer. Hardware requirements for MoneySmart are an Amiga computer, a floppy disk drive, a hard disk (optional), a printer (if you



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want to print MoneySmart checks), and 512k of RAM. MoneySmart v2.0 will be available the last week of July 1996, directly from Grafica Software. MoneySmart will be marketed through magazine advertisement, direct mailings, and the Internet.

Grafica Software, 5255 Stevens Creek Blvd. Ste 282,
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Aminet Set 3

Aminet Set 3 offers everything that was added to the archive since Aminet Set 2 was made, plus full versions of Imagine 4.0, XiPaint 3.2, OctaMED 5 (each full version offers an inexpensive upgrade-path) as well as a couple of commercial games. Aminet Set 3 also offers 900 3D objects, 240 textures and 459 mods, which will not appear on the regular Aminet CD-ROM series. This product is distributed in North America through Cronus.

Cronus (formerly Fred Fish's Amiga Library Services),
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3687, (602) 491-0442, info@anigalib.com

Amiga Supports the 1996 Olympic Games

The 1996 Summer Olympic Games provides a unique opportunity for the Amiga to demonstrate its worldwide appeal, especially among news and media professionals from Europe and the Americas.

Several US-based Amiga companies have joined forces to provide computer support to the press agencies attending the Games. A series of high-end Amigas were placed at the heart of the media editing room for use as an onsite editing tool for video footage taken by various reporters and media producers. The Amiga will be getting some positive media coverage and a chance to demonstrate its prowess handling complex broadcast and video graphics.

Keith Cagle, of Virtual Reality Productions, organized the event space. VIScorp wished to thank the Amiga community for its support in this effort, especially the following companies for their contribution:

Virtual Reality Productions, Keith Cagle
QuikPak, Dave Ziembecki
NewTek, Bob Hoffman & Daneta Colbach
Anti-Gravity Products, June Lavenberg
DPS
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The Not At All Complete Graphics CD-ROM Compilation Digest

There is a world of possibilities in every graphic CD-ROM.

by R. Shamms Mortier

Once you really settle down with your 3D graphics software, and the learning curve straightens out in a horizontal fashion (meaning: the struggle to actually produce 3D art and animation comes naturally, without the excessive time spent pouring through documentation to learn how this and that works), you may begin to notice some heretofore hidden changes in your personality. The subtleties that were buried under the anxiety and pressure of the basic 3D learning experience float to the top of your perception. One of these new recognitions is that you may find yourself looking at the world in a very different manner, noticing things that never called to your attention before.

In computerease, we call this "texture deficit disorder", a condition that affects anyone who has invested more than a year in working with 3D graphics. You can tell if you have it if you lust to capture a segment of everything you look at, and store it away on hard disk as a texture that you can wrap on a 3D object in your favorite application. The amazing thing about it, perhaps its Zen component, is that things in the world that you passed by and took for granted before (dirt, gravel, old weathered siding, leaf configurations...) suddenly jump out at you as "great textures", textures that you must collect and store away.

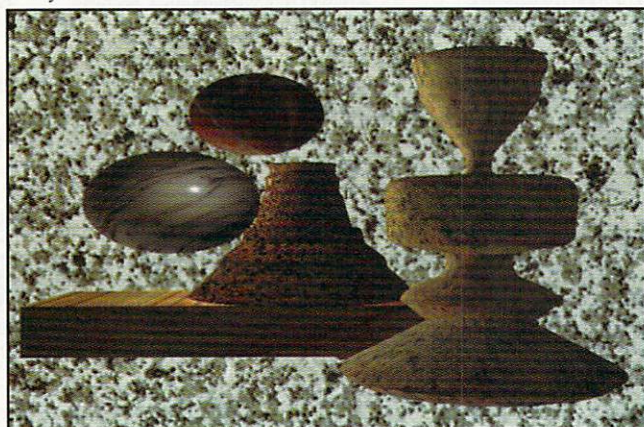


Figure 2. The objects have had textures applied from the "Accents in Stone" CD-ROM. Look at the objects now. What are they saying? What is the general feeling of this scene?

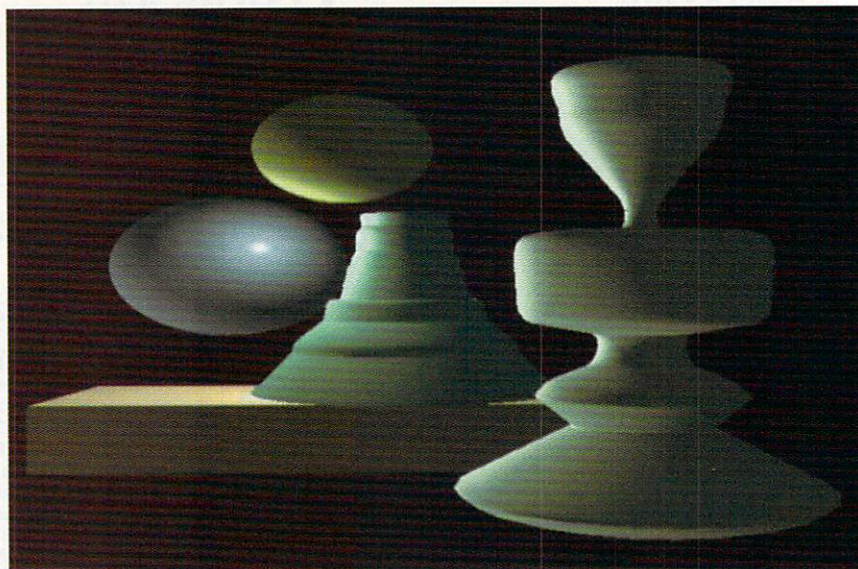


Figure 1. Without observable textures, these objects (sculpted in Aladdin 4D) look blank and lifeless. Our ability to conjecture the "meaning" of a composition has as much to do with the textures exhibited by objects as the shape of reality itself. It's like looking at a face whose worry and smile lines tell a story about the lived life of the person at first glance.

Over the last two or so years, this lust to gather all of the potential textures in the universe has had an effect on the marketing enterprises that have sprung up like weeds to service the 3D computer graphics industry. Coupled with the price reduction in quality CD recording equipment (CD-R) and software, the amount of available textures on CD-ROMs has gone right through the roof. The same is even true for libraries of 3D objects upon which these and other textures can be wrapped. Add to this the emergence of digital still cameras as a resource, so that you actually can grab pieces of the world for storage in your texture libraries, and you have an obsession in the making.

No single article can cover all of the texture and 3D object CD-ROMs available. What we hope to do here is to call your attention to most of the important texture volumes on CD, giving you some hints about the variety and magnitude of textures available for your wrapping and projecting pleasure.

As an Amiga user you should remember that textures contained on Amiga, PC, and Mac CD-ROMs are all up for your pleasure, because the Amiga (with the help of Nova Design's ImageFX software) can read a multitude of picture and platform graphics formats. Note that we are not including prices with these listings. You can contact the developers for that information, since CD-ROM pricing is continuously under revision. With all of this in mind, ease into your observation seat and cast your gaze out at the textured landscape. Here we go!

Accents in Stone

3123 Lee Place
Bellmore, NY 11710

This is a Kodak PhotoCD disk with 114 separate exquisite stone textures. All of the textures were originally captured in 18 meg files, then later reduced to five different resolutions and color corrected where needed. The stones encompass organic stone surfaces, marble, and granite. A full catalog of the color images is included so you know exactly what you are getting before rendering it. Since these are Photo-CD files, they are perfect for using the ASIMware PhotoCD manager. Most 3D users will probably take advantage of the smaller image sizes, while DTP users may wish to use the largest resolutions.

Ala Carte

Digital Stock
(602) 924-0909

If you require images of food, from soup to nuts and everything in between, then be sure to add this CD-ROM to your library. The images are of the highest quality, and there are 100 of them. They come in two resolutions, 128 x 192 and 2048 x 3072. The format is Kodak PhotoCD, so you will want to purchase ASIMware's PhotoCD Manager as a utility. All of the images are precisely cut out of their backgrounds, so using them as elements in composited graphics is a snap.

Almathera

Southerton House, Boundary Business Court.
92-94 Church Road, Mitcham
Surrey, England CR4-3TD

Known for its PhotoGenics software for the Amiga, Almathera is also the distributor of large CD-ROM collections for the Amiga and the PC. Many of the images seem to be drawn from the public on-line domain as well as from original sources, so various libraries contain a mix of images of various quality levels and subject areas. Prices for the collections are usually quite reasonable however, so even if you can only use a percentage of the total, the CDs are a bargain. Almathera collections include: 3D Arena (24-bit images ready for Real3D, LightWave, Imagine, 3D Studio, Retina, and other formats) for the Amiga and PC; Almathera ten CD Library (a mix of video, graphics, utility, audio, and other files); Almathera PhotoGenic specific CD-ROMs (available with the purchase of PhotoGenics).

ArtWorks

Dynamic Graphics, Inc.
6000 N. Forest Park Drive
Peoria, IL 61614-3592
(800) 255-8800

If you are among the vector challenged, endlessly seeking out new graphics for your DTP work in PageStream or other applications, then you owe it to yourself to look at the library of CD-ROMs from Dynamic Graphics loaded with EPS art. These CDs go under the general heading of "ArtWorks". Dynamic Graphics puts out a catalog that features a full description of all of the CDs, and you can order it by giving them a call.

A foldout is included with each CD-ROM that shows what the enclosed graphics look like. I would think at least some sampling of these CDs are required for anyone doing desktop publishing work, on the Amiga or elsewhere. Included in the EPS library are CDs devoted to Borders and Frames, Iconographics (signage and brochures), Design Elements (EPS spot illustrations), Quick Designs, Quickclips (volume 1 is color clip photos and volume 2 contains photos in rectangular sizes), Art in Depth (color spot illustrations from 3D art), and Textures and Backgrounds. These are just some of my favorites. There are many more volumes in the library. Check out the Dynamic Graphics catalog.

Aztech New Media Corporation

(416) 539-8822
anmc@hookup.net

Aztech produces dozens of image titles on CD-ROM. Each one is commissioned from a well known photographer, and

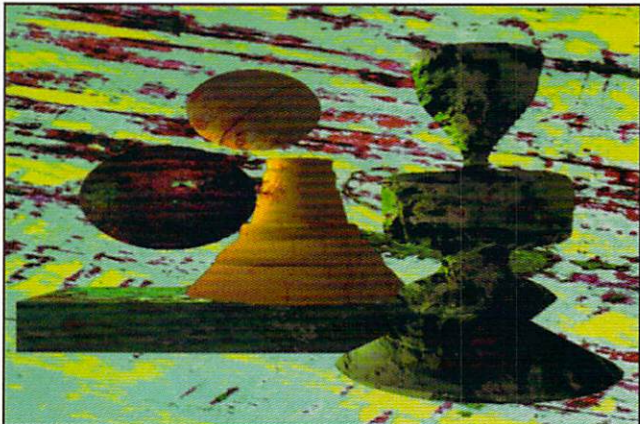
Figures 3-6 (right, from top to bottom).

Figure 3. With looks thanks to the Schatztruhe CD-ROM, "The Beauty of Chaos", the scene now takes on another world appearance.

Figure 4. The Flower Tapestry CD-ROM from Aztech displays the photographic work of Douglas Guthrie for digital artwork applications.

Figure 5. The Blocks and Materials CD-ROM from KETIV Productions contains 400 bitmap textures to choose from.

Figure 6. The Vivid Details volume "Old Paint" is responsible for these textured wonders. You would never think that old painted and peeling boards could offer up such beauty.



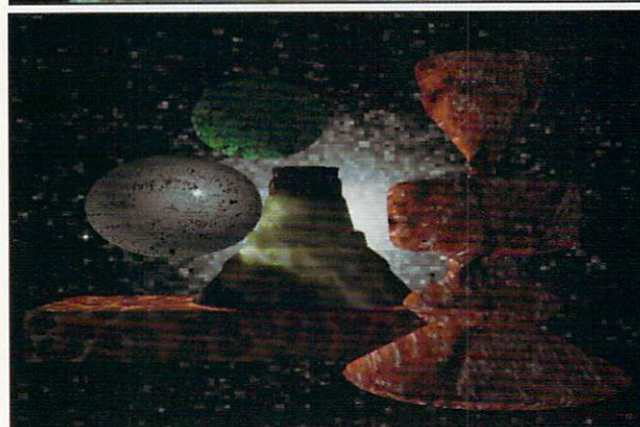


Figure 7 (top). "FantaSeas" from the Fred Fish Amiga Library Services volumes presents textures taken from undersea life. Figure 8 (second from top). Here we see the scene texturized with the help of the "Expressiv Textures" CD-ROM from World Art. Figure 9 (third from top). Almathera in England is one of the most supportive Amiga specific developers, and these textures from their "3D Arena" CD collection are an example of their efforts.

each covers a separate image category. There are about fifty images on each CD-ROM in very high resolution, suitable for print media. And there are a tremendous amount of subjects targeted in the Aztech series.

Preferring to be even more competitive as the market has gotten more and more saturated with CD-ROMs with visual content, Aztech has taken the same step that other large CD-ROM vendors have taken. They have bundled similar content areas together (and even non-similar content areas) and are starting to market their CD-ROMs in much larger boxed sets. For Aztech, this has resulted in "Cubes" of CD-ROMs, boxed sets of ten or so CD-ROMs. So far, they have a multimedia Cube, an ArtWorks Cube, Productivity Cube, and Publisher Cube.

For our purposes, and for the Amiga, the ArtWorks Cube is the target. It contains a thick collection of Aztech top-of-the-line graphics associated content. My favorite singular CD-ROM from Aztech (many of which are contained in the ArtWorks Cube selection) includes: Floral Tapestry, Abstract and Graphic Backgrounds, Underwater Realms (the most alluring water visuals you'll ever use), Gems (you can use these for backgrounds, or grab sections for use in texture designs), Africa (a journey through the eyes of traditional peoples), Visual Rhythms (a selection of magnificent photographic compositions), and Watermarks and Ghosted Backgrounds. This last CD-ROM is great when you need subtle background art against which more blatant graphics will be placed.

My favorite Aztech CDs are called "Spaceviews" of which there are two volumes. If you are a Trek nut, then this collection of planets and astronauts is right up your sidestreet. And talk about photos, just look at what you get on the Aztech Photocube on seven CD-ROMs: 3000 photos from over 40 countries compiled and cross-indexed against 22 general categories (72dpi, 24bit RGB non-compressed TIFF at about 1.2 megs each). All of the images on the other Aztech CDs traditionally come in three formats: 32 bit non-compressed CMYK separated TIFF, 24 bit non-compressed RGB 72dpi TIFF, and 8 bit non-compressed 150dpi grayscale. I can't imagine any computer graphics enterprise without some Aztech representation in its CD-ROM library.

Blocks and Materials

KETIV Technologies, Inc.
6601 NE 78th Court, A-8
Portland, OR 97218
(800) 458-0690

Here is a CD-ROM for anyone who can use models in DXF format (which includes LightWave, 3D Studio, and other high end applications). Blocks and materials has over 50 3D object forms, including aircraft, bathroom items, faucets, chairs, lamps, pianos, video equipment, and a lot more. There are also 1000 3DS algorithmic textures. It contains over 600 models of every type. It also lists over 400 bitmap textures (in three sizes), which include Targa and Gif: Animals, People, Rugs, Plants, Signs, Trees, and Wagons. The images are for the most part cut out and placed on black backgrounds. This is so that they can be easily mapped to a plane in a 3D environment with ease.

Cloud Gallery

Mary and Michael
(415) 326-9567

This may be the most beautiful collection of images on any CD-ROM, and they are worth bringing up on your system and

staring at, even if you don't have any use for them as texture maps. The concept is simple, focusing on a library of 32 fine art sky and cloud photographs taken by the authors in different parts of the world. They are all in high resolution TIFF images that come in at about a meg apiece. All of the images are absolutely stunning.

Corel Corporation

The Corel Building
1600 Carling Avenue
Ottawa, Ontario, Canada K1Z 8R7
(613) 728-8200
<http://www.corel.com>

Corel produces hundreds of CD-ROM image sets a year, and it looks as if they have no plans to stop any time soon. The Corel image sets come as bundles and as stand-alone products. The images are all Kodak PhotoCD format, meaning that you can open them in any of five resolutions. I would like to call your attention to two bundled sets, and to my favorite stand alone CD-ROM from Corel.

The two sets I am most attracted to are called "Great Works of Art" and "Animals", and each set is ten CD-ROMs deep, and contains a hundred images on each CD-ROM. The Great Works of Art CDs include just that, great works of visual art (paintings, engravings, sculpture) from all over the world and throughout history. The paintings are really useful when you want to create an art museum effect in your 3D worlds, as they can be mapped to surfaces and "framed". The Animals CDs are great for morphing sources and targets, as well as for background images.

My absolute favorite stand-alone Corel CD-ROM is called "Religious Stained Glass", and the effect that can be produced when mapping these images to a semi-transparent surface in a 3D program and placing lights behind them is awesome indeed. Corel's image CD-ROMs have a presence on all of the most professional computer graphics studio shelves, and are always high quality collections.

Cronus

(formerly Fred Fish's Amiga Library Services)
610 N. Alma School Road, Suite 18
Chandler, AZ 85224-3687
(602) 491-0442
info@anigalib.com

Cronus is a distribution outlet for the work of independent CD-ROM developers. Represented are the best independents from America, Germany, and more, for both Amiga and PC oriented CD-ROMs with various contents. Among the best that I would recommend as marketed through Cronus are: FantaSeas (a double CD-ROM collection of undersea images, taken by certified undersea divers, in five IFF sizes); Meeting Pearls I & II (a collection of various utilities and applications, including HTML pages for Web users, AMosaic, fractals, photos, and lots more).

The actual "meeting pearls" is about four collections of people- meeting Fionn, meeting FJR, meeting Franky, and meeting Kochtopf, all computer nerd types in pictures.. a bit strange, but...); The Light Works (an astounding collection of some of the most detailed and awesome 3D object and respective texture maps of spaceships and other associated objects, created for Cinema4D, Reflection, and Imagine users by the world renowned computer artist Tobias J. Richter... get this!!!); The Beauty of Chaos, another German creation with blazingly colorful fractal imagery just right for mapping on 3D objects; Texture Gallery (a two disk CD-ROM set of texture images, in multiple formats: Brick, Bumpmaps, Canvas, carpet, Cloth, Crimple, Fire, Formica, Granite, Greenery, Marble, Material, Metal,... and more. These are small sized texture maps, about 150 x 75 pixels).

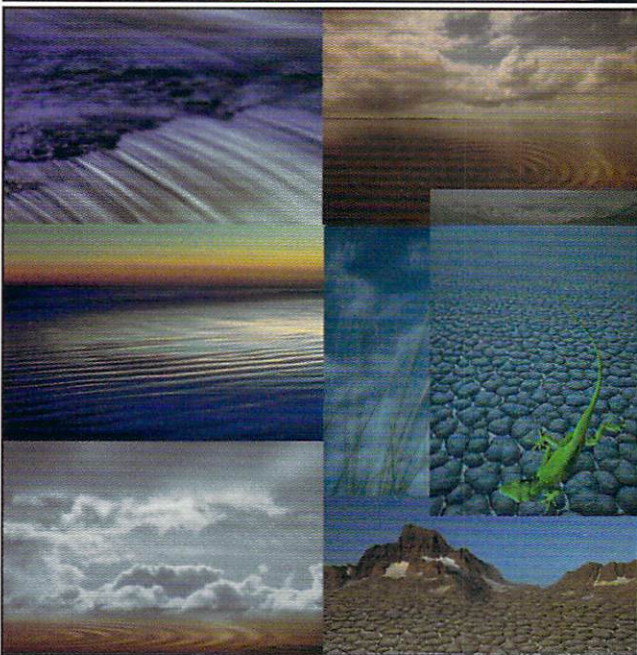


Figure 10 (opposite page bottom). Most computer graphics artists and animators are familiar with the term "re-purposing". It means making the best of the resources you have. The textures in this figure are an example of that, as they are taken from the "Wraptures" CD-ROM that comes as an extra with Macromedia's Extreme 3D application.

Figure 11 (top). The "Texture Heaven" CD-ROM is filled with exquisite textures in a number of formats.

Figure 12 (middle). The Cloud Gallery CD-ROM from Mary and Michael is one of the most beautiful and awe inspiring collections of images you will find on any CD-ROM.

Figure 13 (bottom). The Terra Firma CD-ROM from Texture farm contains startling graphics.



Figure 14 (left). Corel's Religious Stained Glass features stunning photos of stained glass windows.

Fractal Pro Image Library

MegageM
1903 Adria Avenue
Santa Maria, CA 93454-1011
(805) 349-1104

MegageM is known for its Fractal Pro software, a gem of a fractal design application. It's no surprise that this CD-ROM, and others, are being developed at MegageM considering the output of Fractal Pro. The CD contains images in HAM, IFF24, AGA, and BMP formats. There are 23 sets of gorgeous fractals in up to 16,000 colors each, and dozens of Vista DEM objects. Thumbnails of all of the graphics are included, as well as a HAMShow Amiga browser.

Image Club Graphics, Inc.

729 24th Avenue Southeast
Calgary, Alberta, Canada T2G 5K8
(800) 661-9410
imageclub@aol.com

This is another CD-ROM mega-operation. Image Club releases new CD-ROM image collections many times a year, and an accompanying catalog displays all of the offerings. Among their listings of wares are two items I would like to call your attention to: Photogear and Object gear. Each contains dozens of photographic images already cut out of their respective backgrounds for placement in compositions, or texturing projections on a plane in a 3D environment. They come with high and low resolution options, and also with additional files for drop shadow and cast shadow attachments. The images are of course intended more for DTP than DTV use, but creative minds can adapt them to either. There is a wide variety of

images, just right to make a scene, 2D or 3D, more "real".

Key Photos

SoftKey
201 Broadway
Cambridge, MA 02139

These disks are meant to be read in a Windows compatible environment, and work fine on the Amiga because of the Amiga's cross-platform reading capabilities. SoftKey releases CD-ROMs in this collection every month, and you can usually find them discounted in a bin at your local computer store. Typically, they sell for about \$10.00 a CD.

What's great about these CD-ROMs is the quantity and variety of the imagery, as well as the quality. Sizes are usually more in the realm of video use, though portrait orientation (as opposed to the more video friendly landscape orientation) in some cases necessitates that they be manipulated and/or resized in a program like Nova Design's ImageFX before they can be creatively applied. The key Photo CD-ROMs I have contain about 2100 photos each within eighty separate categories. These are well worth the investment to fatten your CD-ROM library of images.

Legendary Design Technologies

25 Frontenac
Brantford, Ontario, Canada N3R 3B7
(519) 753-6120
legend@io.org

Legendary Design acts as a distributor for several independent CD-ROM producers. These cover many areas of use, from visual to audio and more. Among the CD-ROMs they distribute

are: Creative Computers (yes, this is the same company that had its mind set on purchasing the Amiga when Commodore first went down—this CD-ROM contains fonts, graphics, audio files, and shareware programs); dataMIX (as the name suggests, a collection of graphics, Music Mod files, Compugraphic Outline fonts, 3D objects, and Text files); ProPics (a collection of wonderful professional pictures in BMP, FrameStore, IFF, JPEG, and TIFF format, ready to use as backdrops in your 3D work, or as DTP art).

Light ROM 3

Graphic Detail
4556 S. 3rd Street
Louisville, KY 40214
(502) 363-2986
michael@igloo.com

If you are a LightWave user and you do not own this 3-CD-ROM package, you are robbing yourself out of one of the best LightWave resources around. The CD-ROMs contain thousands of LightWave objects and scene files, over half a gigabyte of 3D objects in a variety of file formats (Imagine, 3D Studio, Sculpt, and Real 3D), 700 textures in JPEG, Toaster Wipes, Amiga and PC shareware utilities, and over 1000 DEM files for use with Vista Pro, Scenery Animator, and World Construction Set. This is one of the most varied and useful graphics CD-ROMs around.

Materia Prima

The Valis Group
PO Box 831
Tiburon, CA 94920-0831
(415) 435-5404
valisgroup@aol.com

This is an exquisite collection of 100 24-bit and 8-bit 512 x 512 pixel high-quality TIFF textures, accompanied by a color doc that shows each texture. Also included are 640 x 480 representations of the same TIFF images. The textures are used best as organic components in a scene, from rocks to skin texture maps. The textures are separated into five groups of associated looks, including great skins for reptiles, rocks, and even strange textures like "guts", "confetti", and "underbelly". This is a must-have collection for computer artists and animators.

Figure 15 (right). What is unsightly to most people is eye candy for the computer artist, like these texture examples from the Photodisc "Industrial Backstreets".

Micro R&D

Loup City, NE 68853
(800) 527-8797

Micro R&D has been serving the Amiga community for a long time, and their CD-ROM collections are well worth exploring and utilizing. They offer about a half dozen volumes, each containing different kinds of applications. The three volumes I would like to call to your attention are volumes 1, 2, and 3.

Volume 1 contains software for transposing one graphics format to another, including IFF-ILBM, GIF, JPEG, PCX2, PBM, and BMP, as well as a selection of basic image processing options. A selection of 79 3D objects in the LightWave format are also included, with all of the image maps that support them. Among these is a complete collection of 3D locomotives for railroad buffs.

Volume 2 is a functional demo of Innovision's Broadcast Titler and Montage software is here, plus the full Nature's Backdrop collection of images from Infinite Solutions in a variety of formats. A grouping of GIF images from NASA space missions is also included.

Volume 3 contains the spectacular Mand 2000 fractal generator engine from Cygnus Software. Mand 2000 can guide you in the creation of unbelievable Mandelbrot images and animations.

Moving Textures

Precision Computer Graphics
634 N. Glenoaks Blvd., Suite 367
Burbank, CA 91502-1024
(818) 842-6642

This is one of the two CD-ROMs dedicated to animated sequenced files that is included in this listing. The sequenced files can be mapped to a background as part of a 3D animation, and I have used these images for just that purpose. The CD-ROM contains clouds, fire, water, smoke, and steam, and an additional collection is included with fifteen collections of FX maps (alpha channel single frame animation files). This is something you should investigate if your work involves computer animation.

Motion Clips

Accadia Electronic Arts
Buffalo, NY 14213-1413
(716) 881-5215

This CD-ROM is the second listed in this article that contains animated image sequences that can be mapped to objects



in 3D environments, or used as is in a 2D animation program. Included are twenty-three separate movies. These are single framed JPEGs, many captured on the PAR animation recorder. As an idea, map them to a 3D TV in a 3D scene, and watch the TV play the movie. They can all be looped for effect. Included are Bus Stop, City Nights, four Claymations, three Cloud anims, Fastlane, Fisherman, Football, Machine, Marine, Niagara Falls, Psyche, Science, ShipDetroit, ToyTrain, Traffic, WaterChoppy, and WaterFast. There's also a collection of IFF format background frames.

Photodisc, Inc.

2013 Fourth Avenue
Seattle, WA 98121
sales@photodisc.com

As a company that offers hundreds of CD-ROM volumes to the professional computer graphics community, no listing would be complete without a mention of their work. Photodisc images represent an almost limitless number of categories, so I would like to narrow down my present target to a recent collection that they offer.

It's a two CD set that's called "Industrial Sidestreets", and it contains images of rust and broken dreams. Strangely enough, when viewed as a computer graphics resource, these images translate as beautiful visuals, perhaps asking us to pay closer attention to all of the parts of our world that we usually cross the street to avoid. Involved are background pictures and smaller sampled areas that can be effectively tiled to a 3D surface. Also included are seamless tiled backgrounds

very useful in adding that "dirty" realism that pushes good 3D animations over the edge.

Screen Caffeine Pro 2

jawai Interactive, Inc.
501 East 4th Street, #511
Austin, TX 78701-3745
(512) 469-0502
jawai@aol.com

This CD-ROM comes in two format flavors, Mac and PC. The PC version has 106 image groups with 6 images per group. Each image group contains the main image, four variations of it, and one example of how it might be used (text backdrop, etc.). In addition, for anyone running Macromedia Director on the PC, the CD contains hundreds of buttons that will load into Director for animating.

The Mac version contains 636 graphics, 424 texture manipulation scripts. These are separated into 106 main textures with 424 variations. The manipulation demonstrates how the variations were produced. On both CD-ROMs, the Screen Caffeine graphics are original digital image artwork and not scans, and every conceivable aesthetic category is included.

Syndesis Corporation

235 South Main Street
Jefferson, WI 53549
(414) 674-5200
76004.1763@compuserve.com

If you have been hanging out with the Amiga for a while, you probably know about Syndesis. Their 3D format conversion package, Interchange, has been a staple utility that has enjoyed wide Amiga success. I own and use two

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of the Syndesis CD-ROMs in my computer graphics work: volumes I and II. Each contains a huge library of 3D objects in a multitude of formats. What makes it decidedly useful is that each is accompanied by documentation that shows me visual examples of each file, so that when I need a spider object for instance, I don't need to wade through endless numbered files. Each of the volumes is worth investigating if you have a need to expand your 3D object choices.

Texture Farm

PO Box 460417
San Francisco, CA 94146-0417

There are two texture/image CD-ROMs from these folks that you should look at: Terra Firma and Terra Incognita. There are 100 images on each CD-ROM in IFF format, and each is in five resolutions. The imagery is just perfect for natural organic backgrounds and texture mapping, and a collection of framed graphics is included on each CD-ROM made for text backdrops. The images are first class quality, and the variety encompasses related visual areas. A full color pamphlet packed in each case shows all of the images.

Texture Heaven, I and II

ASIMware
101 Country Club Drive
Hamilton, Ontario, Canada L8K 5W4
(905) 578-4916

These CD-ROMs are marketed by ASIMware. They contain a wealth of unique textures in the BMP, HAM8, IFF24, PAL24, FrameStore (Toaster) and

JPEG formats. The textures are developed from computer art paintings, and come in standard hi-res video sizes (depending on the format). These textures are just right when you want a scene to exhibit a computer art look, and work well when targeted to small objects in a 3D scene. Again, don't forget that ASIMware markets PhotoCD Manager, an absolute necessity for working with Kodak PhotoCD images on the Amiga.

Tree

Onyx Computing
10 Avon Street
Cambridge, MA 02138
(617) 876-3876
onyxtree@aol.com

For those of you that have installed a Utilities Unlimited board in your Amiga, enabling you to run Mac software, "Tree" and "Tree Professional" software from Onyx is a must have. As a Mac application, Tree allows you to model an infinite number of 3D tree objects, and port them to your rendering application where they can be rendered. But Onyx also markets a CD-ROM with demos of the tree software for Mac users, and a huge volume (about 140 megs) of tree and bush pre-renders that can be captured and ported to any platform for incorporating extremely realistic natural elements.

VideoGems I

MegageM, Inc.
1903 Adria Avenue
Santa maria, CA 93454
(805) 349-1104
gems@megagem.com

As the first CD-ROM in a porospective series, the VideoGems volume will be of certain interest to LightWave users, as well as to computer artists and animators in general. It contains 56 new Video Toaster effects, 36 new ColorFonts, dozens of FrameStore graphics, and hundreds of LightWave objects of 3D surface maps of Mars and Earth locations. I can't imagine a LightWave user, Amiga or PC, who will want to skip owning this superlative choice for their library. The volume also contains a slideshow utility, and necessary viewing plugins.

Vivid Details

8228 Sulphur Mountain Road
Ojai, CA 93023-9372
(805) 646-0217

The moment you see any of the volumes in this widening set of CD-ROMs, you know you are in for a high quality treat. The sets come boxed in thick 3-CD packs, and the graphics are in

full representative color and detail on the front. These are extremely high-end products, meant for the highest quality products, whether in DTP or video use. The "small" TIFF files are about 3 megs deep, while the larger DTP files are about 30 megs! For 3D computer graphics, the smaller files will do fine, and I have even halved them twice before using them on 3D objects in a scene with no visible loss of quality. The collections are grouped under various headings, and I highly recommend them all, especially "Old Paint" and "Flowers". Each of the three CD-ROMs in the sets hold sixteen images, for a total of 48 images in each volume.

World Art: Expressiv' Textures

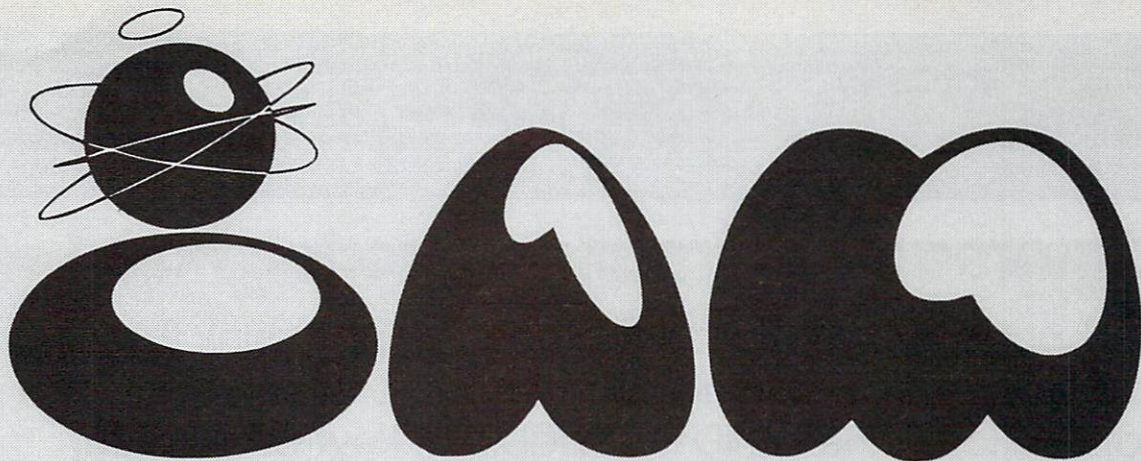
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9100 S, Dadeland Blvd.
Miami, Florida 33156

The Expressiv' Textures collection from World Art contains textures pre-mapped on cubes, spheres, and tetrahedrals, ready to cut out and place in your art. A special Presets drawer contains small (about 100 x 80 pixel) texture maps of various surfaces, from coral, to fossils, glass, and more. All are TIFF images. A Screen drawer contains larger 24-bit and 8-bit images of the same textures in larger (640 x 480) sizes, many of which have beveled frames suitable for text overprinting. A separate Tiles drawer contains the same images in a tilable format. great for large 3D surfaces.

And so...

If I told you that this article represented all of the CD-ROM image collections available, I could righteously be accused of stretching the truth to the breaking point. What I can tell you is that the titles and developers I have mentioned here are responsible for a good amount of what is available for computer graphics and animation use. It is expected that the CD-ROM image collections will reach about a billion dollars in sales by the turn of the century, and some of those dollars will doubtless be yours and mine. The truth is that we are creatures of the eyes, and that beautiful imagery is always appreciated, so we can never say "that's enough". This is even more true for the computer artist in search of ever new content for the crafting of electronic dreams.

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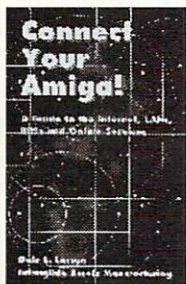
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Cinema4D Animation Tutorial: Part 1

Although we will stick to the basics, don't think that Cinema4D is anything less than a professional application. Cinema4D is capable of keyframe, path, hierarchical, inverse kinematic, and special FX (explosions, melts, and more).

by R. Shamms Mortier

Cinema4D from HiSoft presents the Amiga user with a new series of tools, options, and challenges. As we discussed in a previous review in *Amazing*, Cinema4D reinvents the wheel when it comes to the way experienced Amiga animators have accustomed themselves to certain standards in other animation applications. This is not necessarily negative, but it just means that a little study is in order when trying to master the software.

As art and animation software, Cinema4D offers some state-of-the-art alternatives, from raytrace rendering to inverse kinematics (which means moving one part of a hierarchical figure, like the arm of a humanoid, while the connected parts also move in

relationship to the selected element). The most important thing to understand about Cinema4D is that it is designed to keep the interface very simple, while offering a wealth of options. These two goals usually fight each other, but in Cinema4D, they actually cooperate.

This is accomplished by having the user select multiple tools at the same time. The "Move Tool" and "Resize Tool", for instance, can be connected to the screen or to an object by selecting the appropriate icons. When you get the hang of this multiple tool selection, maneuvering in the software is a snap. This is not software that you can just jump into without reading the manual, so be prepared to invest a day or two doing just that.

Animating

C4D offers the Amiga animator all of the animation possibilities, from keyframe to path to kinematic animation construction. Each of these has its purposes and tools. We are going to walk through a simple keyframe animation in C4D for this tutorial, and look at all of the necessary steps along the way. The tutorial is meant for owners of C4D, and will not seek to teach where the C4D tools are located. That has to be done in advance by the C4D user. The tutorial also assumes that you have some knowledge of general Amiga practices, like clicking the mouse and going about other standard Amiga tasks.

We are going to create a text animation, which is the best way to learn any animation software. Text animations go from logo-flybys (a text logo flies according to specific relationships with the XYZ plane) to more intricate productions.

First, let's use the C4D tools to create a line of text. Go to the XY view, and bring up the "Text" requester from the Object menu (it can be found in the pop-up centered upon the icon that looks like a small person, second from the bottom on the right). Enter your data in the text string box, and select an appropriate font. Select "OK" and notice that the text object is written to the screen.

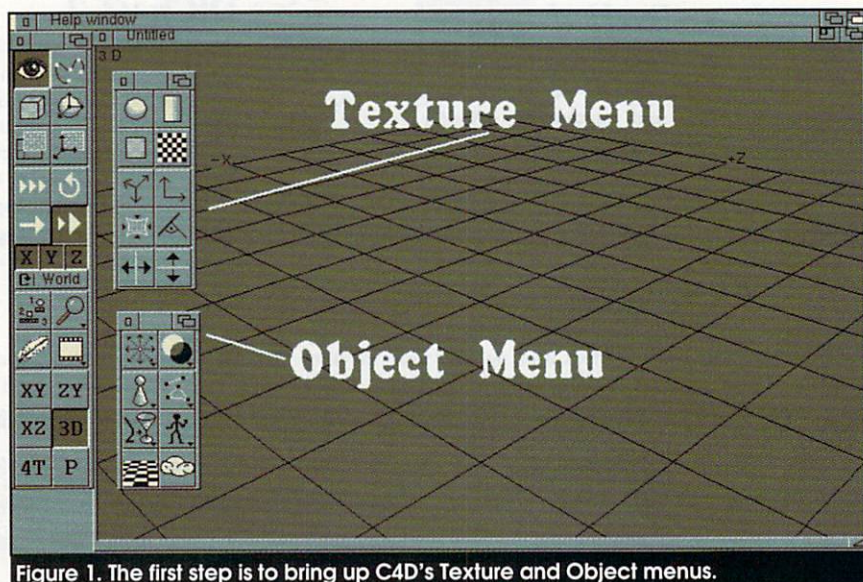


Figure 1. The first step is to bring up C4D's Texture and Object menus.

Each letter has a control point attached so that it can be easily selected, either by clicking the control point or by going to the "Object Selection" menu (in the menu bar under the Edit menu) and selecting the letter object. Once selected an object can be targeted for a texture. Being able to select objects from a menu of listed choices also helps when the screen gets overcrowded with layered objects whose control points are difficult to isolate.

Take a little time to experiment with moving, rotating and resizing the letters one by one. Note that the Box icon in the toolbar has to be turned on, as that targets manipulation to objects and not to the screen. After just a few moments, these operations will become second nature to you, and you will begin to appreciate the way that C4D goes about its chores.

Applying a texture is easy enough. First select the object, either by clicking on its control point on-screen or by selecting it from the objects list. Then select a texture to apply, using a C4D texture from the included library if you are new to all of this. More experienced users can select to apply their own textures, by simply loading them into C4D's texture list.

Render a sampling of a frame (in either scanline or raytrace) to get a feel for rendered looks and rendering times per frame. C4D renders in full raytrace, is fairly fast (a few minutes or so) on an Amiga 4000, and will necessarily take longer on slower systems. A timely way to test your renders is to do a "shaded" render first. This gives you an idea of the object lighting, without the ground plane rendering. Then, once you are finished moving stuff where you want it, you can do a finished raytraced or scanline render. Shaded renders on a Amiga 4000 are very fast, taking only a few seconds to come into view.

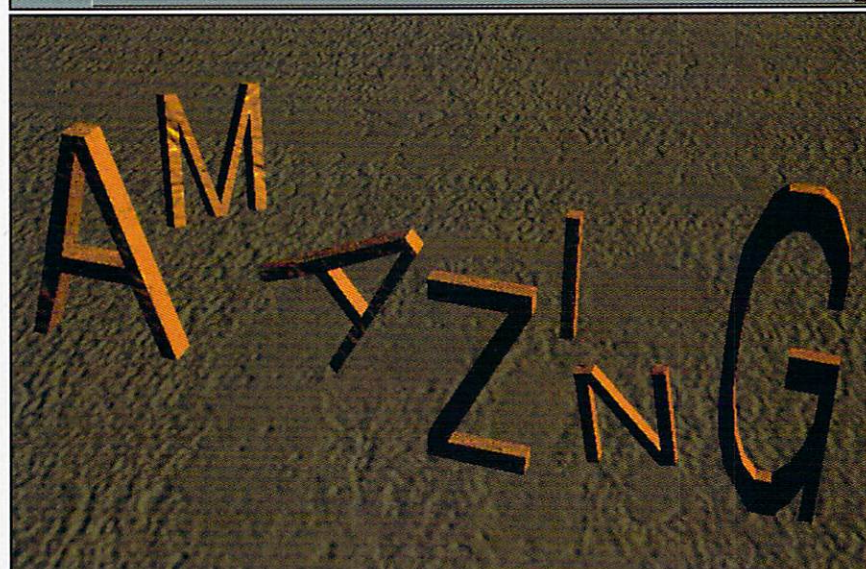
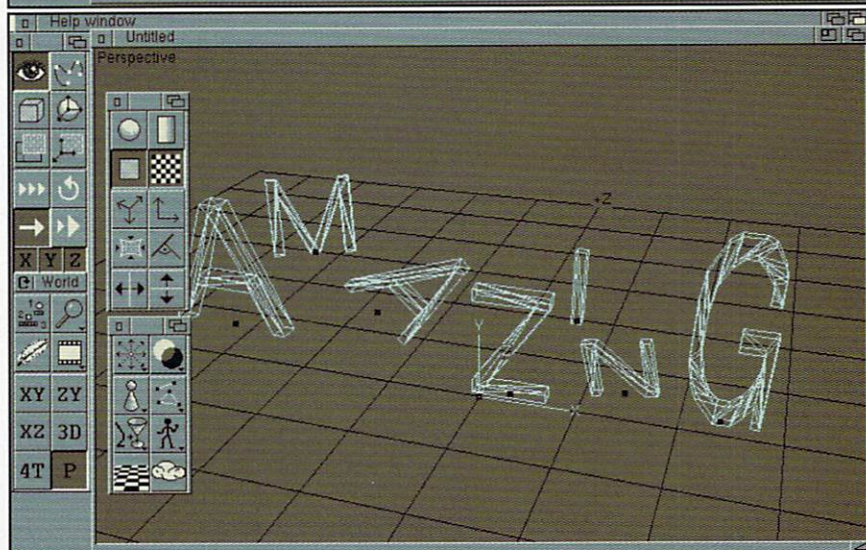


Figure 2 (top). After entering the desired text, it appears on the screen. Notice that each letter has a control point attached, so individual letters can be selected.

Figure 3 (middle). The text object can be manipulated either in whole or in part, by rotation, resizing, and movement on the XYZ plane. This is a prerequisite to understanding basic keyframe animation.

Figure 4 (Bottom). Here we see the same scene as Figure 3, this time texture mapped and raytrace rendered. A Moonscape ground texture acts as a frame for the "Orange peel" textured letters. The full raytraced image (752 x 480 video frame) took 18 minutes to render.

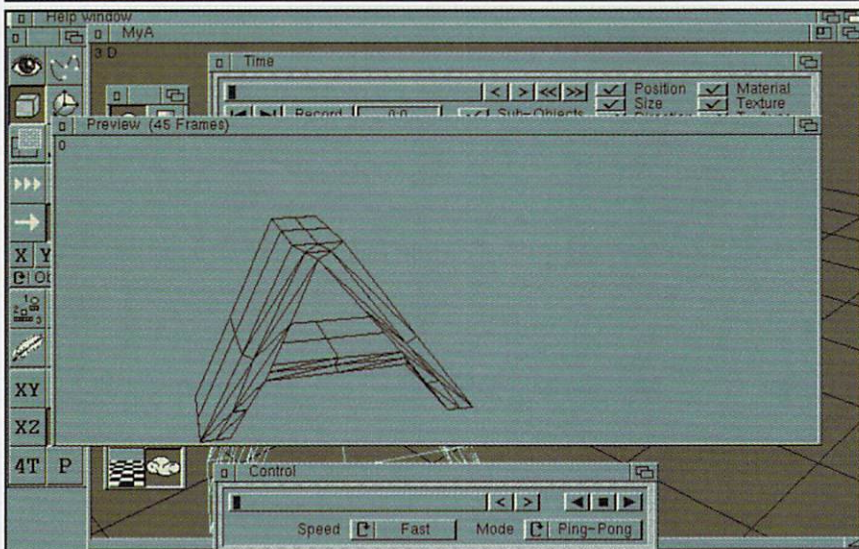
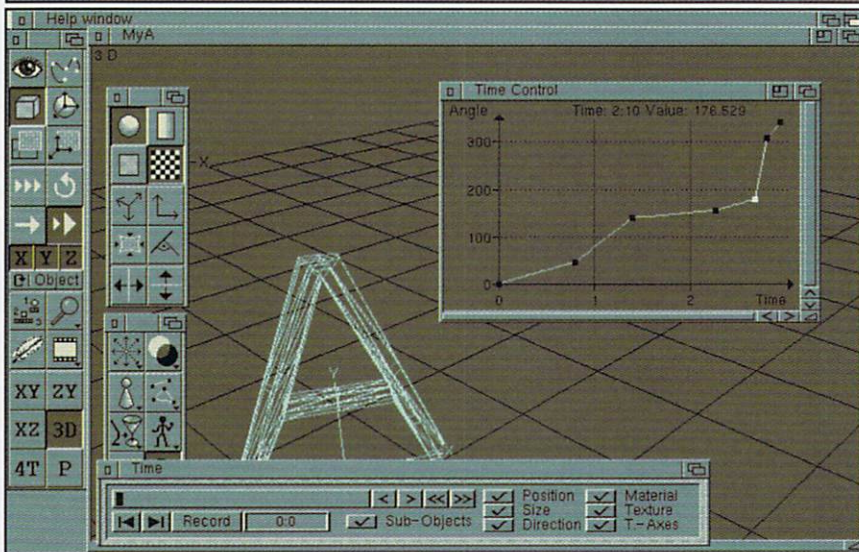
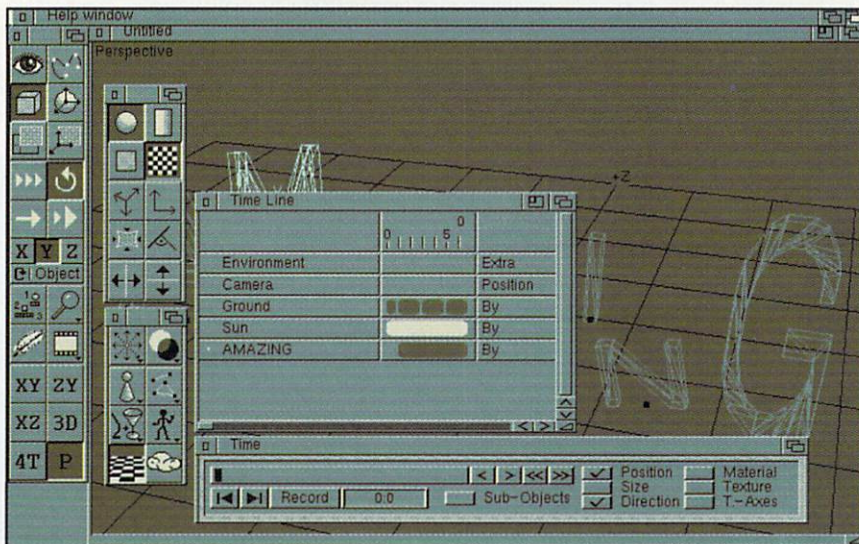


Figure 5 (top). C4D's Time and Timeline windows.

Figure 6 (middle). C4D's Time Control Window shows how the animation will accelerate/decelerate at certain keyframe nodes.

Figure 7 (bottom). When a preview 2 color animation is complete, it can be previewed in a window dedicated to that purpose, and manipulated by VCR like controls. Higher quality animations can be loaded into TrueBrilliance or Brilliance and played back.

Now that we have walked through some of the rendering and scene basics in C4D, let's talk about the animation features. Since this is the first of a few C4D animation tutorials we will cover in *Amazing*, we are going to stick to the basics, but don't think that C4D is anything less than a professional application. C4D is capable of keyframe, path, hierarchical, inverse kinematic, and special FX (explosions, melts, and more). What we are going to do in this first tutorial is to create a simple animation that shows an object (in this case, a letter) in animated movement, describing the necessary tools needed to make this happen.

So the first thing is to create a new stage by selecting "New" from the Preferences menu, and to place a letter object (just follow the previous discussion on letter origination above). Then the letter should be textured, and an optional background picture, or a sky or ground texture, should be put in place. Now we are ready to begin the animation process.

C4D's basic animation element is the "Key", recognizable to experienced animation users as a "keyframe". Keyframe animation takes us from one keyframe to another, with the computer interpolating all of the in-between frames ("Tweens") as the animation progresses. The computer does its work based upon the frames-per-second data. Quality animations run at either 30 or 60 frames a second. 15 frames a second is about as slow as you can go without making movements on screen seem too chunky or jerky.

The next thing to do in a C4D animation is to set the global parameters from a window of the same name. This includes setting the total time-length the animation is to be, and the frames-per-second rate involved. 15 frames per second for a 5 second animation equals 5×15 or 75 rendered frames. It is always best to create smaller sized animations first, especially if you are new to either or both the software and the animation process. Learning, like good food, is best assimilated in chewable amounts.

So bring up the Global Parameters in the keyframe menu, and set the duration of the animation to 2 seconds at 15 frames a second. This gives us a total of 2×15 , or 30 rendered frames. Make the size of the output a C4D "full size" frame, which is 320×256 pixels, by using the right mouse button on the frame icon, bringing up the save/size menu.

The Time Window has controls to move the animation sequence ahead a frame at a time, a second at a time, and a keyframe at a time. Moving a keyframe at a time, obviously, means that you have to have set up the keyframe nodes first.

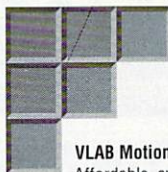
Setting up a keyframe node couldn't be easier. Move the time slider by seconds to appropriate time segments (for instance, create three keyframe events: one at the start, one at the middle, and one at the end of the animation), and hit the record button each time. Adjust the size, position, and/or rotation of your text object with each placement before hitting the record button. Now you have three keyframes in your animation sequence. You should also see a path written to the screen if you changed the object's position during the sequence. This is the path the object will follow as it moves along.

The way the object accelerates and decelerates between keyframes can be edited in the Time Control Window, as demonstrated in Figure 6. When a two-color test animation is completed, just go to "Play" in the Keyframe menu list and you can play it back on screen. More high level animations can be played back in Brilliance and TrueBrilliance (AGA).

Next time, we will look at more intricate Cinema4D animation effects, and guide you through more C4D magical creations.

Take care. We'll see you in ROMulan space. Enjoy!

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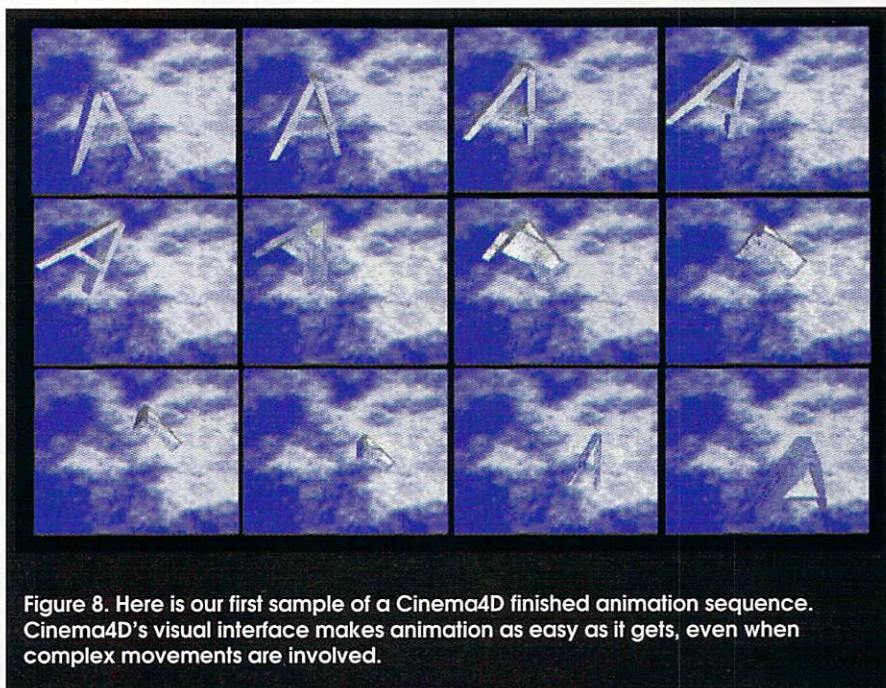


Figure 8. Here is our first sample of a Cinema4D finished animation sequence. Cinema4D's visual interface makes animation as easy as it gets, even when complex movements are involved.



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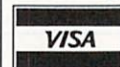
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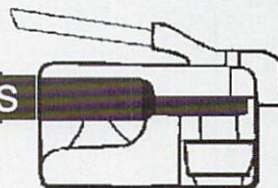


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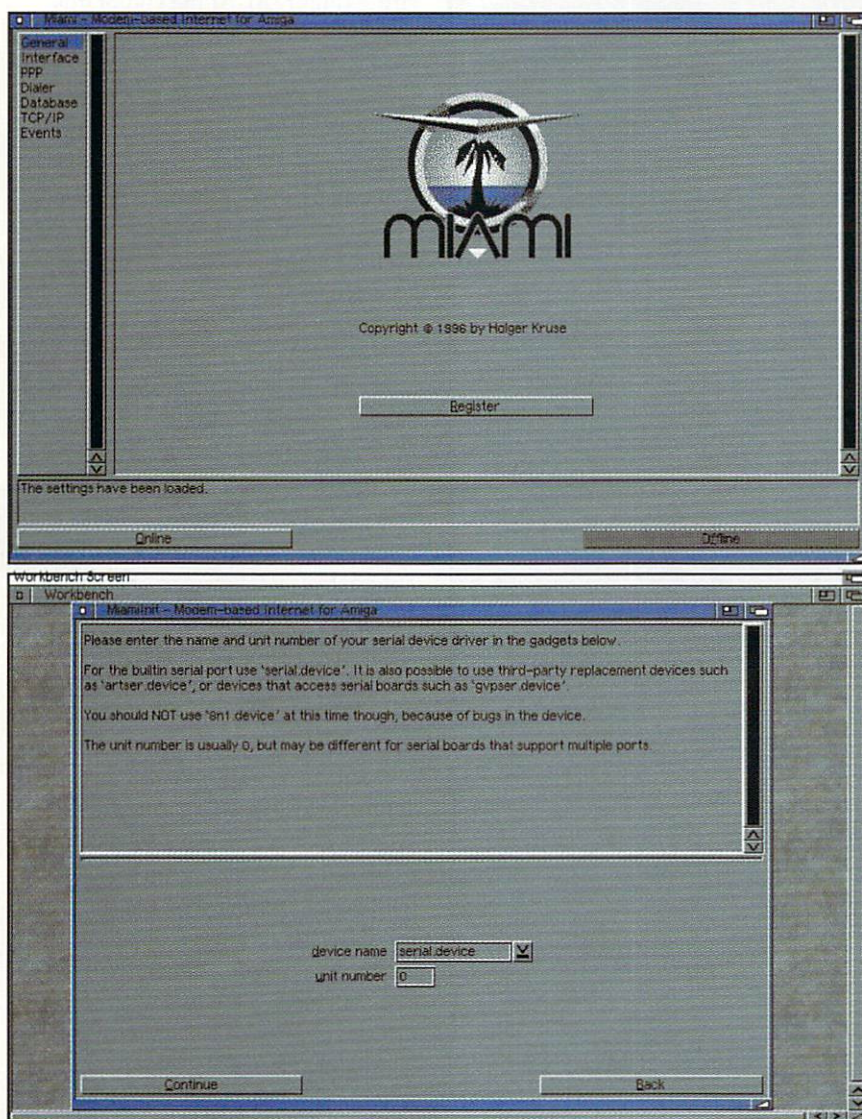
on line

amiga telecommunications

by
Rob
Hays



**Frustrated with your attempt to
connect to the Web?
Try a trip to Miami!**



Suppose I told you that there is a program available for your Amiga that would connect you to your local Internet Service Provider with one click? And suppose I told you that this program eliminates the need to have AMiTCP/IP, ppp, and their supporting programs on your hard drive? Suppose further that I told you this program was so easy to use, that less than five minutes after unpacking the archive, you can be using your favorite Web Browser on the World Wide Web? There is a new way to get to the Internet on your Amiga; by way of Miami.

Miami

No, I don't need a lesson in geography, and you do not have to dial the 305 area code. Miami (Figure 1) is a new program package from Holger Kruse, programmer of the ppp.device. As of this writing (mid-July), the fourth public beta version has just been released, and it is nothing short of amazing. None of the above statements are exaggerations, and if you have been struggling to install and configure AMiTCP/IP, you will love this program.

The first step after unpacking the archive to a drawer on your hard drive is to run the MiamiInit program. This opens a series of windows with text gadgets for you to fill in (Figure 2 and 3). This includes information such as the phone number of your ISP, what

Figure 1 (top). Miami is so easy to use, that in less than five minutes, you can be using your favorite Web Browser on the World Wide Web.

Figure 2 (bottom). Your first step is to run the MiamiInit program which opens a series of windows with text gadgets for you to fill in.

You can send an Archie search out to find the file for you, then retrieve it with a few mouse-clicks.

type of connection they provide, user id and password, etc. Choosing your model of modem from a list of over 50 sets the appropriate initialization string (Figure 4). At the end of this process, MiamiInit dials your provider, queries the server there for information, such as domain names, name server IP numbers, and more (Figure 5). This process also creates the script that will be used for future sessions. This script will dial, and log you into your provider, and initiate the ppp connection.

After this first test, the program will disconnect the modem, and create a file. The first time you start the main Miami program, you load this file, and then save it to create the settings for the program to use. Now whenever you click the online gadget in the main Miami window, everything will be automatically taken care of for you. The registered version even allows ARexx scripts to be started by various Miami events, so that you could have your favorite Browser started for you upon connection.

All of the various configuration settings are available through a GUI (Figure 6), which means there are no more obtuse script files to try to edit. So if your provider changes the required sign on protocol, or you get a new modem, with a few button-clicks you will be back on line. One of the options available is an activity simulator (Figure 7). If your provider automatically disconnects after a set period of inactivity, Miami can be set up to automatically send a signal often enough to keep you connected.

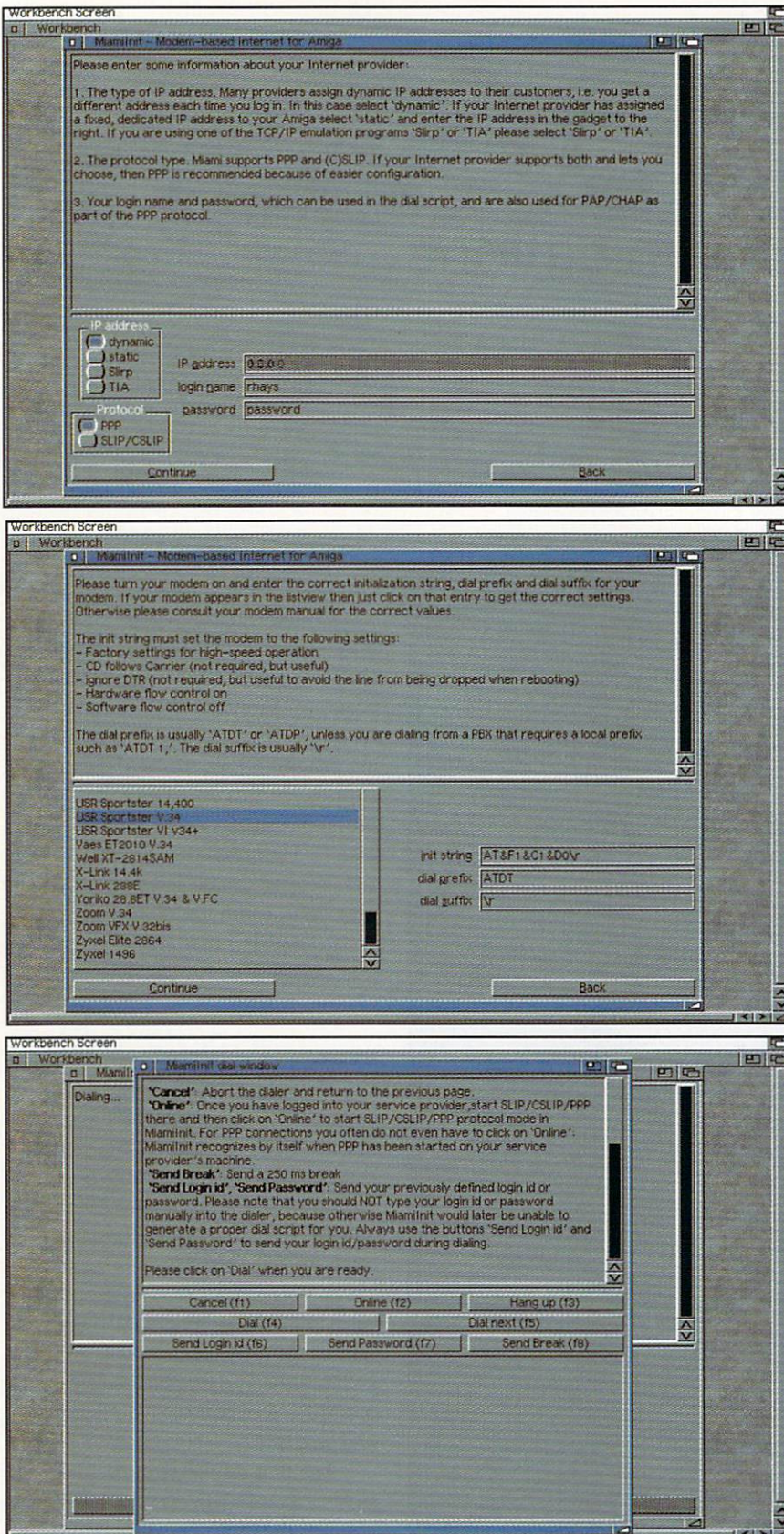


Figure 3 (top). More text gadgets from the MiamiInit program.

Figure 4 (middle). You can choose your model of modem from a list of over 50 sets which creates the appropriate initialization string.

Figure 5 (bottom). MiamiInit dials your provider and queries the server for information, such as domain names, name server IP numbers, and more.

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Miami is shareware with various prices depending on several different criteria. The maximum price is \$35. The demo version, in addition to the above AREXX limit, limits you to 60 minutes per on line session, and has a three number limit in the dialer directory. Miami requires OS 2.1+, MUI 3.3+, a phone modem, and a PPP or SLIP account at an Internet Service Provider. If you have a shell account, you will also need TIA or Slirp to simulate the ppp connection.

Currently Miami is only available from the authors' home page:

<http://www.america.com/~kruse/amiga/Miami.html>

or from the following FTP site:

<ftp.nordicglobal.com/miami/>

Also available is a list of Amiga internet software known to be compatible with the Miami package. Voyager, AWeb, AMosaic, and IBrowse are all compatible, and the author states that any software that runs properly under AmiTCP/IP should work with Miami.

AmFTP

AmFTP (Figure 8) is another gui FTP client along the lines of GUI-FTP (see the June 1996 On Line). AmFTP from Oliver Wagner and Mathias Mischler is a much more complete program, however. Besides featuring a no-typing approach to Internet file transfers, it also includes an Archie search program. You can send an Archie search out to find the file for you, then retrieve it with a few mouse-clicks.

Also supported is the Aminet Download Tool for downloading and automatically de-compressing archived versions of AmiNet file listings. Batch downloads are supported, and you can resume an interrupted download.

AmFTP is shareware with a \$30 registration fee. AmigaGuide documentation, and an Installer script round out the package. AmFTP requires OS 2.0+, MUI 3.1+, and a TCP protocol stack, such as AmiTCP/IP, AS225, or Miami. Currently at version 1.53, you can find AmFTP at several sites, including the comm/tcp subdirectory of AmiNet, and the Vapor homepage at:

<http://www.vapor.com>

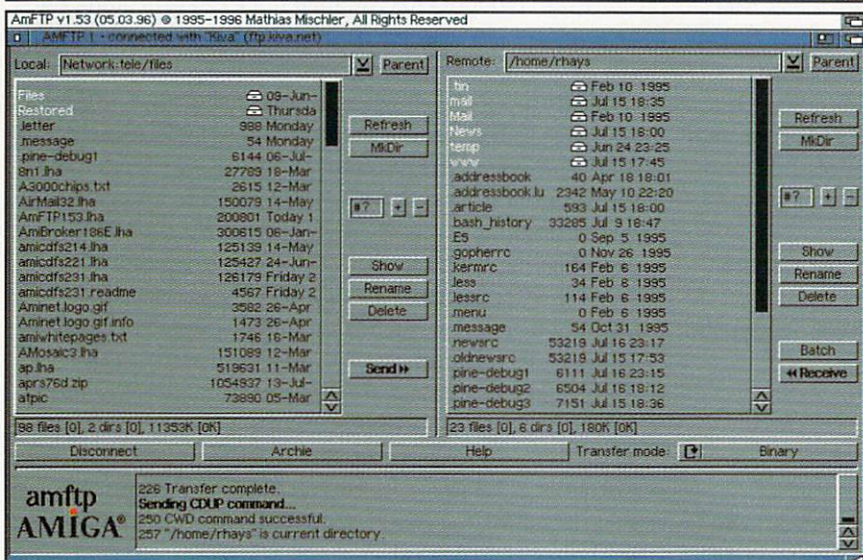
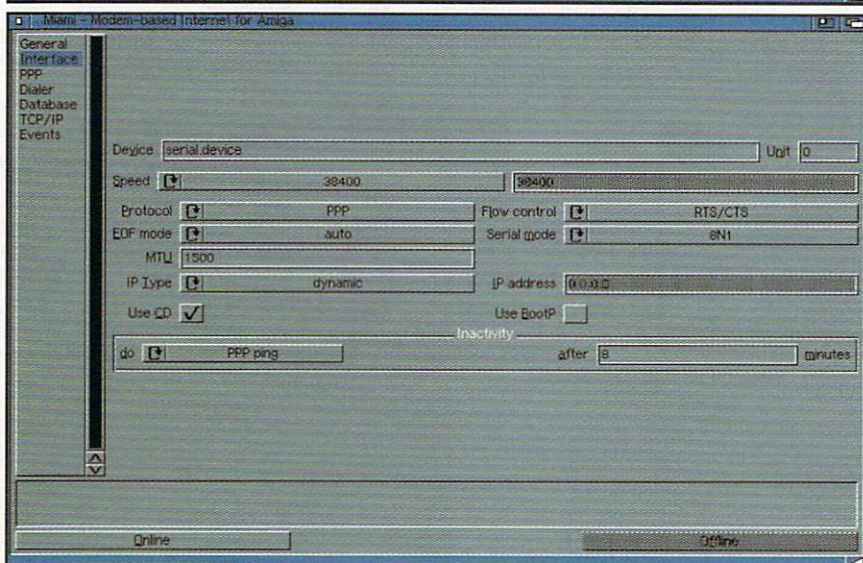
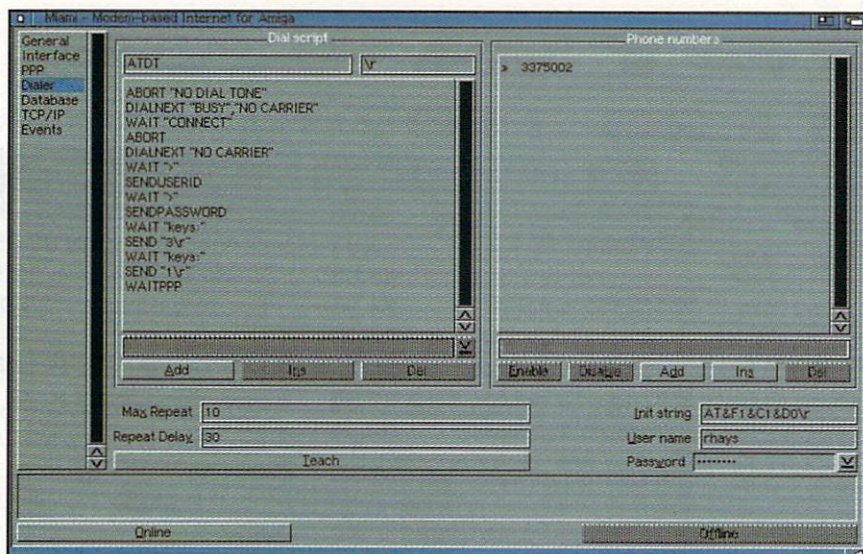


Figure 6 (top). No more obtuse script files to try to edit when all of the various configuration settings are available through a GUI.

Figure 7 (middle). The activity simulator will send a signal often enough to keep you connected.

Figure 8 (bottom). AmFTP is a gui FTP client with a no-typing approach to Internet file transfers and an Archie search program.

Who Ya Gonna Call?

Here are some more Amiga BBS numbers as supplied by readers. If one is in your area, give them a call and check it out. Tell them Rob sent you!

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CONTACT: Phillip Turnbull

NAME: The Inner Circle
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SETTINGS: 8-N-1
CONTACT: JW Olson

NAME: The Codex BBS
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"Spike" (Spike Dethman-co-sysop)
E-MAIL TO: spike@neonate.org

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<http://www.kiva.net/~rhays>
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RHAYS on Delphi
72764,2066 on CompuServe
Rob Hays on Portal

For U.S.Mail:

Rob Hays
P.O.Box 194
Bloomington, IN 47402

Please include a SASE if you need a personal reply.

If you run an Amiga specific BBS, send me the information callers will need to access your system. Phone number(s), modem speeds, software settings, etc. As a service to the Amiga community I will include the information I receive in this column from time to time.

If you come across any World Wide Web sites you feel would be of interest to the Amiga community, pass them along for inclusion in the Hotlist of the Month. Send the info to any of my addresses above.

That's all for now. See you on line!

•AC•



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Web Typesetting

Part 6:

Reading Form Data

by Randy Finch

Catching user information
from your web site.

The screenshot shows a web page titled "Randy Finch's Survey Page". Below the title is a prompt: "Please fill in the form below to let me know who is visiting my Web pages:". The form contains several fields: "Last Name:" with "Finch" entered, "First Name:" with "Randy" entered, "City:" with "Florence" entered, "State:" with "AL" entered, "Country:" with "USA" entered, and "Email:" with "rfinch@hiway.net" entered. There are radio buttons for "Gender:" with "Male" selected. A dropdown menu for "Computer system you are using:" shows "AmigaDOS" selected. Below that is a list of interests: "Football", "Electronics", "Astronomy", "Photography/Videography", and "Philosophy", with "Photography/Videography" selected. A checkbox "I want Email when new stuff is added to Randy Finch's Home Page" is checked. At the bottom is a text area for "Enter your comments below (1000 characters max):" containing the text "I think your Web site is the coolest. Cooler than anything I have ever seen before."

Figure 1. Filled out Survey Page

Last time, I discussed how to create a form using HTML code. I mentioned at that time that a server-side program is required to read the data submitted by the user from the form. In this article I will discuss how to create a server-side program for reading form data. Let me say at this point that this is a complex topic. I will only be able to skim the surface. I have a couple of references at the end of the article for people who want to learn the details.

CGI Programs

When submitting form data from a Web page, a CGI (Common Gateway Interface) program is required. A CGI program is one that receives its starting commands from a Web page, usually one containing a form. Before a CGI program executes, the Web server creates a special processing environment in which the program operates. Such things as HTTP (Hyper-Text Transport Protocol) headers are parsed into environment variables that your CGI program can use.

Other information is also made available. The program can use this information in whatever way it chooses. It should then output some information. The output includes some HTTP response headers and possibly some HTML code. Some of this is done for you by the server. I will only discuss what needs to be done by the program itself.

Many different programming languages can be used for CGI programs. A shell script, a C program, or a C++ program would work fine. However, the language of choice for these types of server-side programs is Perl. Never heard of it? Well, I hadn't either just a few months ago. After I investigated it, I

found out why it is so popular. Perl programs are stored as ASCII files and then parsed for errors before they are executed. Perl makes use of associative arrays which is very useful when storing form data. Also, Perl is free. I use a Perl program for reading the data from the HTML form discussed in the last installment.

For security reasons, some Internet Service Providers (ISPs) require that all CGI programs reside in a root directory named /cgi-bin. Others do not have this requirement. You need to find out what your ISP requires before creating a CGI program. My ISP allows CGI programs to reside anywhere on their server as long as the program name has a .cgi extension. I put all of my CGI programs in a subdirectory named cgi-bin in my personal Web page directory.

GET or POST

I mentioned last time that a form can submit data to a CGI program using the GET method or the POST method. The GET method creates an environment variable named QUERY_STRING containing a specially encoded string of characters with the form data in it and then executes the CGI program. The program can read this environment variable and decode it.

The POST method executes the program first and then feeds the encoded string via its standard input (STDIN), which should be familiar to all you C programmers out there. Again, the program can read the string and decode it. The disadvantage of the GET method is that the server may have a maximum length for environment variables. If the form allows a lot of data to be entered, it

could overflow the buffer. The POST method does not have this disadvantage and is thus the preferred method of submitting data.

URI Encoding

When form data is submitted to a CGI program, either using the GET method or the POST method, it is first encoded into one long string. A URI (Universal Resource Identifiers; also called URL or URN) encoding scheme is used for this task. The rules for this type of encoding are:

1. Create name/value pairs for each input field on the form. The name is supplied by the NAME attribute of a control on the form (see last installment for details). The value is the data supplied by the user for that control, a default value, or an empty value.
2. Names and values are separated by equal signs (=).
3. Name/value pairs are separated from each other by ampersands (&).
4. Spaces are converted to plus signs (+).
5. Reserved characters (there are many) and special characters (such as %) must be encoded by converting them to their HEX values in the form %HH where H is a hexadecimal digit.

If you look at the HTML code in the last installment, you will see that all of the controls have a NAME attribute associated with them. The first four controls are named LASTNAME, FIRSTNAME, CITY, and STATE. If my name is Joe Van Dyke, Jr. and I live in New York, NY, then the first part of the URI encoded string for this form would be:

LASTNAME=Van+Dyke%2C+Jr%2E&
 FIRSTNAME=Joe&CITY=New+York&STATE=NY

Notice the plus signs where spaces should go, the equal sign separating the name and values, and the ampersand separating the name/value pairs. Two reserved characters, a comma and a period, are converted to their hexadecimal values, %2C and %2E. This string, with the additional name/value pairs not shown, will be assigned to the environment variable QUERY_STRING if the GET method is used by the form, or the string will be passed to the CGI program's standard input if the POST method is used.

Of course, once the CGI program receives the string, it must be decoded before the data is useful. Fortunately, there is a free routine available that automates this task. It will be discussed in the next section.

Finally, Reading the Form Data

Listing 1 shows a Perl program I wrote entitled survey.cgi. It reads in the URI encoded string discussed above, decodes it, and then produces some HTML code to be sent back to the user's browser. Let's see how it works.

The first line of the program is:

```
#!/usr/local/bin/perl.
```

All of you UNIX buffs are already overly familiar with the meaning of this line. It tells the shell that the following code should be executed by the Perl interpreter. By making this the first line, the program can be executed by just typing the name of the program, survey.cgi, rather than typing "perl survey.cgi". Some UNIX systems do not support this feature, so check it out first.

The next line is:

```
require("cgi-lib.pl");
```

This statement tells the Perl interpreter that an external library of routines, named cgi-lib.pl, will be required by this program. The cgi-lib.pl library is a nifty (a little 60's lingo) library of Perl subroutines for performing some common CGI tasks.

The library was written by Steven Brenner and is freely distributable. The library may or may not be available on your ISP's server. It was not on mine. Therefore, I put a copy of it in my personal cgi-bin subdirectory. Make sure you put the proper path in the require command.

Parsing the URI Encoded String

The cgi-lib.pl subroutine that my program uses is ReadParse. It is used in the third line of survey.cgi. In order to give you a taste of Perl, I show the

ReadParse routine in its entirety in Listing 2. I cannot describe it in detail, but here is a synopsis. A local variable named "in" is created and will be used to store data from the URI encoded string. The final decoded data will be passed back to the calling program using the variable passed to ReadParse (in this case, input).

ReadParse determines whether the GET or POST method is being used to pass the URI encoded string. If the GET method is being used, \$in (a scalar variable), is equated to the environment variable QUERY_STRING. If the POST method is being used, \$in is read from STDIN. In this case, the length of the input is determined from the environment variable CONTENT_LENGTH. At this point, let's use the URI encoded string discussed earlier as our example string and see what happens to it as it is processed by ReadParse.

1. At this point,
 \$in =
 LASTNAME=Van+Dyke%2C+Jr%2E&
 FIRSTNAME=Joe&CITY=New+York&STATE=NY
2. The split function divides the scalar variable, \$in, into an array, @in, of name/value pairs. Now,
 \$in[0] =
 LASTNAME=Van+Dyke%2C+Jr%2E
 \$in[1] = FIRSTNAME=Joe
 \$in[2] = CITY=New+York
 \$in[3] = STATE=NY
3. A loop is executed where \$i is set equal to values between 0 and one minus the number of array elements in @in. The latter number is represented by \$#in. Within the loop, several operations are performed on each element of the @in array. First, plus signs are converted to spaces. Now,
 \$in[0] = LASTNAME=Van
 Dyke%2C Jr%2E
 \$in[1] = FIRSTNAME=Joe
 \$in[2] = CITY=New York
 \$in[3] = STATE=NY
4. The name=value strings are split into two scalar variables \$key and \$val, where the former will equal the name and the latter will equal the value. Now,
 On 1st pass: \$key = LASTNAME
 \$val = Van Dyke%2C Jr%2E
 On 2nd pass: \$key =
 FIRSTNAME
 \$val = Joe
 On 3rd pass: \$key = CITY
 \$val = New York
 On 4th pass: \$key = STATE
 \$val = NY

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Survey Item	Your Answers
First Name	Randy
Last Name	Finch
City	Florence
State	AL
Country	USA
Email Address	refineh@hiwaay.net
Gender	Male
Computer System	AmigaDOS
Interests	Reading Fiction, Reading Non-fiction, Writing, Web Browsing, Web Development, Computer Programming, Computer Graphics, Fractals, Photography / Videography, Philosophy, Objectivism, Science, Mathematics, Swimming, TV, Movies, Good Food, Family Time
Inform you of Web site changes	Yes
Comments	I think your Web site is the coolest. Cooler than anything I have ever seen before.

Figure 2. On-the-fly Verification Page

- The hexadecimal numbers in the \$key and \$val strings are converted to their alphanumeric values. Now,
On 1st pass: \$key = LASTNAME
\$val = Van Dyke, Jr.
On 2nd pass: \$key =
FIRSTNAME
\$val = Joe
On 3rd pass: \$key = CITY
\$val = New York
On 4th pass: \$key = STATE
\$val = NY
- Finally, an associative array, %in, is created where the indexes of the array are the \$key strings and the values of the array elements are the \$val strings. Multiple values for the same name, such as from a multi-select list box control, are separated by the characters \0.
This is what will be passed back to the input variable in the survey.cgi program. Now,
\$in{'LASTNAME'} = Van Dyke, Jr.
\$in{'FIRSTNAME'} = Joe
\$in{'CITY'} = New York
\$in{'STATE'} = NY

The final construct, an associative array, may be new to you. It uses strings to index an array rather than a numeric value. This construct is not unique to Perl; other languages use it. However, it is rather rare. It is easy to see how useful it is for handling form data. You can easily obtain the value from a control by indexing the array with the name of the control.

As you have noticed, Perl can be very powerful, performing complex tasks with simple commands. However, it can be rather cryptic. I do not have the space to delve deeper into Perl programming. Whole books have been written about this topic. I list two that I own at the end of this article.

Cleaning Up the Form Data

Now that the form data has been parsed into an associative array, it is time to use it for something. It is generally a good idea to regurgitate the data entered by the user so she can check it for errors. If the information is correct, it can be passed on to another CGI program for final handling. If the data is incorrect, the survey page needs to be redisplayed so the user can re-enter the data. The purpose of survey.cgi is to regurgitate.

After parsing the data with ReadParse, survey.cgi next separates the multiple values for the INTERESTS control by substituting a comma and a space for each occurrence of \0. This procedure is not necessary for the other controls as they do not accept multiple inputs.

Check box controls that are checked by the user pass a value of "on" to the CGI program. Unchecked boxes do not send a value at all. These values are no good for displaying to the user. Therefore, the \$input{'SENDINFO'} array element is set equal to "Yes" if the box is checked and a value of "No" otherwise.

Creating an On-the-Fly Web Page

A Web browser expects to receive an HTTP response header before any other information so it can know how to handle what follows. There are many different response headers. One of the most common ones is the Content-type response header. This header informs the browser what type of data is about to be passed to it. The print command can be used in a Perl CGI program to pass information back to the browser.

Therefore, the command:

```
print "Content-type: text/html\n\n";
```

sends a message to the browser that some HTML code is about to be sent. The rest of survey.cgi is devoted to sending the HTML code. You C programmers will recognize the \n as a newline character. All response headers must end with two newline characters or an error will occur.

The next line,

```
print <<"ending_tag";
```

tells Perl that all of the following lines of text, up to the label ending_tag, should be printed as though each line had the print command in front of it. The double quotes around the tag name specify that variable names in the text should be replaced with their current values before printing the line. (Note: If single quotes

are used, as in print <<'ending_tag';, then no substitutions will occur.)

You will recognize the lines to be printed as standard HTML code. Basically, a table with two columns is created. The first column contains a description of the information provided by the user. The second column contains the information itself. This format makes it easy for the user to verify whether the information he provided is correct.

Near the top of the HTML code is a form. The ACTION attribute for this form is set to execute yet another CGI program named handlesurvey.cgi. This form is unusual in that it does not have any displayable controls for entering information! However, it does contain 11 controls of type hidden. These controls have names that are the same as the controls on the form discussed in the last installment. The values of these hidden controls are equal to the values parsed from the previous form. (Remember that the \$input{} associative array elements will have their actual values substituted before the lines are printed.) Hidden controls are a way of passing data through an intermediate form without the data actually being displayed on the form.

The current form also has two submit buttons, one with a value of "Information is Correct" and the other with a value of "Information is Incorrect". The CGI program handlesurvey.cgi will determine which button was selected and take the appropriate action. Handlesurvey.cgi will be discussed in the next installment.

Figure 1 shows the survey form filled out with information about myself. Figure 2 shows the verification page that is created on the fly by the survey.cgi program.

What Have We Accomplished?

We have covered a lot of territory in a short amount of time. I'm sure some of you are totally confused at this point, as would I if I were hit cold with this article. This is unfortunate. It would have been better to examine how to program in Perl in greater detail before presenting this information. However, this was simply not possible. Perl is a substantive language with many special variables, operators, etc. It would require an entire series of articles on Perl programming alone. Therefore, I am taking a surface level approach, presenting only an overview of how to write server-side CGI programs using Perl to make use of form data. If you want to learn all the details, you need to purchase some good books about Perl and/or CGI programming and start digging in.

As far as the CGI program in Listing 1 goes, it did the following:

1. Parsed the URI encoded string created from the user's input data and created an associative array containing this information.
2. Cleaned up some of the input data such as separating multiple values with a comma and presenting check box data in a more readable way.
3. Sent an HTTP response header back to the browser to inform it that HTML code was on the way.
4. Sent HTML code on-the-fly. The code created hidden controls for passing information on to another CGI program. A table was used to display the user's input. Two submit buttons were created for the user to verify that the data is correct or that it is not.

Until Next Time

Next time I will discuss the final step in handling the form data. Until then, get some CGI and Perl books and start reading. Perhaps then some of the stuff I discussed in this article will make some sense. Below are two books I own that I have found useful. Remember to visit my Web site, <http://fly.hiwaay.net/~rcfinch>, and fill out my survey form.

For learning Perl:

Wall, Larry and Schwartz, Randal L.; *Programming Perl*; O'Reilly & Associates, Inc.; 1991.

For learning CGI programming using Perl:

Herrmann, Eric; *Teach Yourself CGI Programming with Perl in a Week*; Sams Net; 1996.

Listing 1.

```
#!/usr/local/bin/perl
require("cgi-lib.pl");

&ReadParse(*input);

$input{'INTERESTS'} =~ s/\0/ /g;

if ($input{'SENDINFO'} eq 'on') {
    $input{'SENDINFO'} = 'Yes';
}
else {
    $input{'SENDINFO'} = 'No';
}

print "Content-type: text/html\n\n";

print <<"ending_tag";

<HTML>
<HEAD>
<TITLE>Your Survey Answers</TITLE>
</HEAD>
<BODY>
<FORM METHOD=POST ACTION="handlesurvey.cgi">
<INPUT NAME="FIRSTNAME" TYPE=hidden VALUE="$input{'FIRSTNAME'}">
<INPUT NAME="LASTNAME" TYPE=hidden VALUE="$input{'LASTNAME'}">
<INPUT NAME="CITY" TYPE=hidden VALUE="$input{'CITY'}">
<INPUT NAME="STATE" TYPE=hidden VALUE="$input{'STATE'}">
<INPUT NAME="COUNTRY" TYPE=hidden VALUE="$input{'COUNTRY'}">
<INPUT NAME="EMAIL" TYPE=hidden VALUE="$input{'EMAIL'}">
<INPUT NAME="GENDER" TYPE=hidden VALUE="$input{'GENDER'}">
```

```
<INPUT NAME="SYSTEM" TYPE=hidden VALUE="$input{'SYSTEM'}">
<INPUT NAME="INTERESTS" TYPE=hidden VALUE="$input{'INTERESTS'}">
<INPUT NAME="SENDINFO" TYPE=hidden VALUE="$input{'SENDINFO'}">
<INPUT NAME="COMMENTS" TYPE=hidden VALUE="$input{'COMMENTS'}">

<CENTER>Here is the information you submitted. Click the appropriate button
below.</CENTER>
<P>
<CENTER>
<INPUT NAME="SUBMITRIGHT" TYPE=submit VALUE="Information is Correct" SRC="">
<INPUT NAME="SUBMITWRONG" TYPE=submit VALUE="Information is Incorrect" SRC="">
</CENTER>
</FORM>

<CENTER>
<TABLE BORDER=2>
<TH align=left><B>Survey Item</B></TH>
<TH align=left><B>Your Answers</B></TH>

<TR><TD>First Name </TD><TD>$input{'FIRSTNAME'}</TD></TR>
<TR><TD>Last Name </TD><TD>$input{'LASTNAME'}</TD></TR>
<TR><TD>City </TD><TD>$input{'CITY'}</TD></TR>
<TR><TD>State </TD><TD>$input{'STATE'}</TD></TR>
<TR><TD>Country </TD><TD>$input{'COUNTRY'}</TD></TR>
<TR><TD>Email Address </TD><TD>$input{'EMAIL'}</TD></TR>
<TR><TD>Gender </TD><TD>$input{'GENDER'}</TD></TR>
<TR><TD>Computer System </TD><TD>$input{'SYSTEM'}</TD></TR>
<TR><TD>Interests </TD><TD>$input{'INTERESTS'}</TD></TR>
<TR><TD>Inform you of Web site changes </TD><TD>$input{'SENDINFO'}</TD></TR>
<TR><TD>Comments </TD><TD>$input{'COMMENTS'}</TD></TR>

</TABLE>
</CENTER>
</BODY>
</HTML>

ending_tag
```

Listing 2.

```
# ReadParse
# Reads in GET or POST data, converts it to unescaped text, and puts
# one key=value in each member of the list @in
# Also creates key/value pairs in %in, using '\0' to separate multiple
# selections

# Returns TRUE if there was input, FALSE if there was no input
# UNDEF may be used in the future to indicate some failure.

sub ReadParse {
    local (*in) = @_ if @_;
    local ($i, $key, $val);

    # Read in text
    if (&MethGet) {
        $in = $ENV{'QUERY_STRING'};
    } elsif (&MethPost) {
        read(STDIN, $in, $ENV{'CONTENT_LENGTH'});
    }

    @in = split(/[&]/, $in);

    foreach $i (0 .. $#in) {
        # Convert plus's to spaces
        $in[$i] =~ s/\+/ /g;

        # Split into key and value.
        ($key, $val) = split(/=/, $in[$i], 2); # splits on the first =.

        # Convert %XX from hex numbers to alphanumeric
        $key =~ s/%(..)/pack("c", hex($1))/ge;
        $val =~ s/%(..)/pack("c", hex($1))/ge;

        # Associate key and value
        $in{$key} .= "\0" if (defined($in{$key})); # \0 is the multiple separator
        $in{$key} .= $val;
    }

    return scalar(@in);
}
```


This Old Workbench, Part 3 Compression on the Amiga

Create needed space on your Amiga On-The-Fly.

By Dave Matthews

In previous articles, I talked about renovating the Workbench in manners both practical (plumbing, wiring), and aesthetic (new coat of paint, what have you). Well, now it is time to turn to that ever popular (and ever insufficient) closet space.

I wish my Amiga were like Dr. Who's TARDIS. If you have ever watched the BBC SF serial Dr. Who, you will know what I am talking about. Dr. Who's Space/Time ship, the TARDIS (Time And Relative Dimensions In Space) had many fine qualities, but one of the most amazing was the fact that it was bigger on the inside than on the outside. From the outside, it appeared as a police call box, on the inside, however, it was seemingly boundless. Imagine the closet space!

My Amiga is most definitely not like the TARDIS (though it occasionally does require a good whack to get it started). No, like most, my Amiga has a finite amount of hard drive

space, which is crammed to bursting with programs, data, and an ever expanding array of system libraries, fonts, handlers, dos drivers, datatypes, and other essential byte-thieves. And I must confess, the icons alone consume an embarrassing amount of hard drive real estate.

The obvious solution is to buy a bigger hard drive, or maybe a Zip or Jaz removable drive. For those without large Amiga expense accounts, the hardware route to storage heaven may be impractical. What can you do?

Compression Relief

Well, there are inexpensive (and even free!) ways of getting extra storage space, if you are willing to put up with the occasional compromise. Using compression software, you can nearly double the apparent size of your hard drive.

If you have used computers for very long, you will have at least a

passing acquaintance with compression. Most commercial and PD software is compressed using LHA, LZX (a new version, lzx121.lha, was recently released on the nets) or similar programs, and is uncompressed during the installation process. While LHA and LZX certainly compress files well, and save space on your backup media, they are not of much use for compressing programs and files you use on a regular basis.

Programs known as "crunchers" or "packers" were early attempts to solve this problem. There are dozens of different crunchers; Imploder (freeware) by Albert-Jan Brouwer, Peter Struijk, Paul van der Valk, and Erwin Zwart, and Powerpacker (commercial, w/ freely available demo, PWRPCKR.LHA,) by Nico François, are two of the more familiar.

Both programs could compress data files, both had supporting utilities such as text readers to display this crunched data. But the more general usage for Powerpacker and Imploder (and other programs of this type) was to compress programs in such a way that they would be automatically decompressed when run. You could compress your programs, yet still run them as though they were not compressed at all. To achieve this seeming magic, after compression, a "decrunch-header" was added to the program. This would (with the help of a library) decompress the program, load it into memory, where the Amiga would run it as any regular program.

Crunchers went a long way toward solving the space problem, but still left much to be desired. Only

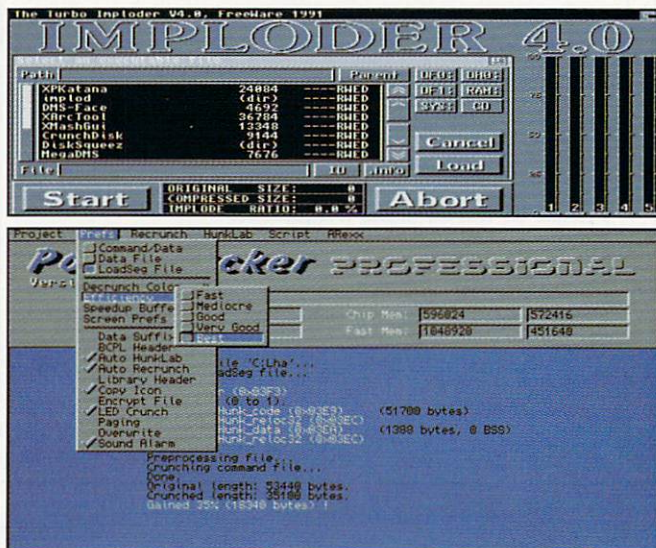


Figure 1 (top).
Imploder
Figure 2 (bottom).
Powerpacker 4.3

program files could be crunched and decrunched automatically. Data files, libraries, fonts etc could only be compressed if the application you used understood the compression method. Aside from a few viewers, almost no applications could deal with crunched data. See Figures 1 and 2 for screenshots of Imploder and PowerPacker.

On-The-Fly Compression-Decompression

What was needed was a transparent way to compress and decompress files, handled automatically by the system. When you loaded a compressed file into your word processor, you would not need to know if it was compressed or not, the file would be decompressed on-the-fly and you would use your program as always.

One of the first programs to attempt this was Powerpacker Patcher, by Michael Berg, a small program which would allow most applications to load Powerpacked files transparently to the user. You could even powerpack your icons and fonts. A later more complete solution, again by Michael Berg, was PowerData. This program was more robust, corrected some of Powerpacker patcher's limitations, and allowed Applications to read and write Powerpacked data. Both of these programs served their purpose, but only worked with PowerPacked files.

XPK (eXtended PackEr)

It was about this time that one of the most useful compression utilities for the Amiga was released, XPK (XPK25usr.lha, freeware), created by Urban D. Mueller (of Aminet fame). The XPK package, is a modular compression system, allowing users to choose from a variety of compression methods, and programmers to easily extend the system with new methods and other enhancements, such as data encryption.

XPk consists of a master library, and various compression libraries. The real strength of XPK is its extendability. As new compression

Figure 3 (top).
XPKatana,
XPk Front End
Figure 4 (middle).
XPk-Knight,
script mode
Figure 5 (bottom).
XPk-Archive Library

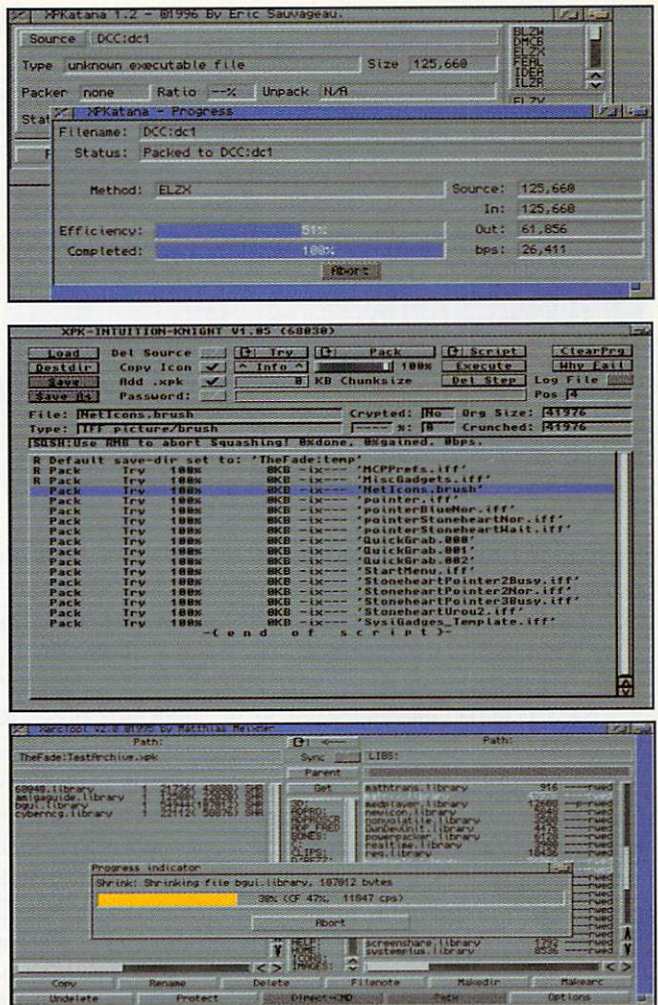
methods are developed, they can easily be added to the existing XPK system. XPK is flexible enough that other tasks, such as data encryption, can also be implemented. The XPK package comes with several utilities for handling compression, including Martin A. Blatter's XDrop, a no fuss commodity with an Applcon for Drag-n-drop (de)compression.

XPk comes with a number of compression libraries, and there are many available. Several I am familiar with:

- XPKDMCB.LHA André Osterhues, shareware, powerful, 68020+, FPU, >2MB
- XPKELZX.LHA Adam Przybyla, Piotr Kasprzyk, freeware LZX xpk libraries (NOTE: incompatible with Shapeshifter!)
- XPKHFMN136.LHA Martin Hauner,

- fast, average compression
- XPKGZIP_1.0.LHA Antonio Schifano, Slow, but very good compression
- XPKILZR.LHA Jose Renau Ardevol, Fast (Un)Packing Low Mem Requirements
- XPKMASH-R4.LHA Zdenek Kabelac, Fast, pretty good compression
- XPKPWPK10.LHA Michael Barsoom, freeware PowerPacker based xpk packer
- XPKRAKE_V1.7.LHA Karsten Dageförde, freeware, My favorite for general use
- XPKSHRI_V2.2.LHA Matthias Meixner, freeware, Excellent compression, slow

There are many programs which work with and support XPK and other



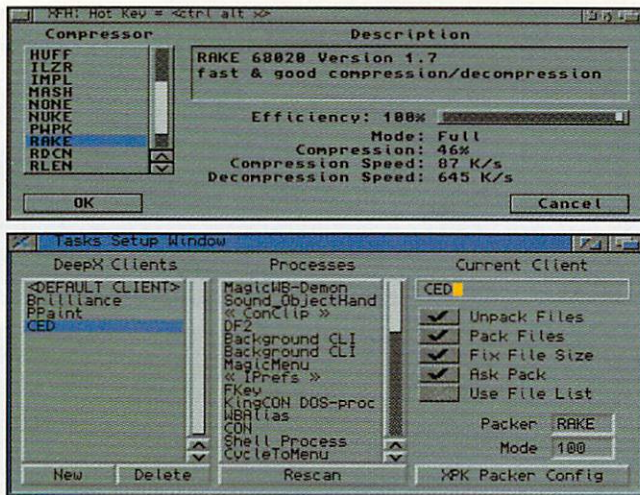


Figure 6 (top).
XFH Commodity
Figure 7 (bottom).
DeepX Task
Setup Window

forms of Amiga compression. While I can't list every one, here are a few you might want to check out.

XFD

XFD, (XFD114.lha, Freeware) by Georg Hörmann, is a system for decrunching files, and features support for almost every cruncher known on the Amiga. (I will have to take the author's word on that, since I have never heard of most of the 45 included crunch formats.)

XPKatana

Eric Sauvageau's XPKatana (XPKatana12.lha, shareware), is a front end for the XPK compression system. XPKatana allows you to pack, unpack, repack, and test not only XPK compressed files, but (with XFD support) also many non-XPK crunchers. XPKatana has a full ARexx port and script recording to make processing multiple files easier. XPKatana also can identify (via FileID.library) many filetypes, making it useful for deciding which packer to use. See Figure 3 for a shot of XPKatana.

XPK-Knight

XPK-Knight, by A. Grossberger, (xpk-knight_105.lha, shareware) is an even more extensive front end for XPK. XPK-Knight has powerful script capabilities for automating repetitive compression tasks, and also features a TRY mode, which will successfully compress a file using many packers,

which could be useful for determining which packers are best at certain types of data. See Figure 4 for a screen shot of XPK-Knight.

XPK-Archive Library

Matthias Meixner's XPK-Archive Library (XPKArhivePack.lha, giftware) is an interesting program, which supports XPK for creating archive files. Rather than compress individual files, XPK-Archive bundles groups of files into a single compressed archive (rather like LHA or LZX). One nice feature is an included utility, XArcTool, to browse through these archives, adding, extracting, deleting individual files, using a DOpus like interface. See Figure 5 for XPK-Archive/XArcTool in action.

Alternate Choices

Some other handy XPK utilities are Daniel Balster's XPACKGAUGE.LHA and XPKDOPUS.LHA, XPK compression w/ progress gauge for Directory Opus 4 and 5 respectively. Finally, XPKDTP-1.0B.LHA, by Michal Letowski, is an XPK datatype.

XPK in itself does not feature on-the-fly compression/expansion, but there are several companion programs which fit the bill nicely. XFH, by Kristian Nielsen, (XFH1_38.LHA, freeware) is what I use, and is an extremely useful and stable program. XFH also includes a commodity to control compression, written by Nicola

Salmoria. XFH allows on-the-fly compression and decompression of both directories and partitions. Once XFH is installed and setup correctly, you will have access to a new pseudo drive, a sort of 'evil' twin of the drawer or partition you chose. If you chose HD1, you will normally have a drive named XHD1. Saving a file to HD1 will result in no compression, just as if XFH were never installed, while a file saved to XHD1 will be compressed. See Figure 6 for the XFH commodity.

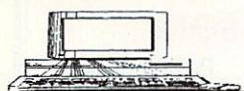
DeepX (DEEPX12.LHA, freeware) by Adam Ciarcinski is another XPK compliant application which takes a different approach from XFH. Rather than basing compression/expansion on a particular partition or directory, DeepX acts as a sort of front end to allow any programs to use XPK compression. For instance, you could give Personal Paint the ability to load and save XPK compressed pictures. See Figure 7, for the DeepX Task setup Window.

Michael Berg's PowerData has reappeared, this time with full XPK support. Power Data Professional (PDPPro1_0b.lha, shareware) is similar to DeepX in function and usage. (I'd say more, but I can't get the prefs program to run on my system. I ran it once, when I first installed it, but now it just crashes. No doubt some aversion to my odd system setup.)

Beyond XFH

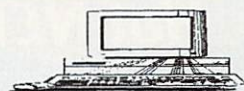
XFH is useful for most situations, but what if you want to compress only the seldom used programs in your C drawer and leave the more frequently used ones alone? Since XFH works on entire directories or partitions, we need some other option.

Xloadseg, by Christian Schneider, is a small system patch (included with the XPK package) which allows programs, and even some libraries, drivers etc. to be crunched, then used as you would normally. When running a program, or when a program calls for a library, Xloadseg handles the decompression (via XPK) and the program, library, font carries on, all transparently. Except for a slight delay



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(and a bit more memory used during decompression), the user is unaware of Xloadseg's actions.

Danger! Danger!

While using XPK and XFH or related utilities to save HD space works well, there are pitfalls and cautions you should be aware of. If you have limited RAM, you need to be careful crunching big files. The Nuke packer, for instance, needs about 200K (in addition to the actual file size) to de/compress a file. I have used XPK quite successfully on a stock 2MB Amiga 1200, but XPK really fares better with more RAM. Also, a faster processor will make XPK less noticeable.

Be especially careful with the ELZX packer! This actually packs files using LZX, which means it is fast and has excellent compression, but also requires a bit more care than most of the other XPK packers. More importantly, it appears to have a fatal conflict with Shapeshifter's PrepareEmul program. After using Shapeshifter, you will find that files packed with ELZX are inaccessible. Attempting to unpack these files will corrupt them. Shutting the power off and then rebooting without PrepareEmul is the only solution. I lost several files before I figured this one out.

Using Xloadseg can free up a tremendous amount of HD space, but not every program, library, font etc will work

with Xloadseg. When you see the amount of space saved, it is tempting to go nuts and compress everything in sight! Resist this, start slowly, crunching and testing one file at a time. Be particularly careful when compressing libraries, devices, etc.

In the course of this article, I inadvertently compressed the XPKMaster.library. DO NOT GO IN THERE! Next time I booted up, my Amiga came to a grinding halt. UH OH. In order to run, I needed to uncompress XPKMaster.library, but of course, you need XPKMaster.library to decompress anything. Well, at least I made a backup!

You can also get in a situation where a file is either packed or unpacked when it should not be. For instance, if you copy an XPK packed file to an XFH autocompression volume, the file will be packed twice, making it unusable. Always remember which volume is compressing and which is the standard "Base" drive. This is actually the real heart of using XFH. For instance, if you use an entire partition, say HD1, then you will have two drive icons displayed on the workbench, HD1 and XHD1. Saving a file to HD1 will NOT compress the file, while saving a file to XHD1 will.

With the above caution in mind, XPK, XFH and related utilities are quite useful for variety of compression uses. On my system, I have gotten, on average, 50% compression ratios. That is quite a few megabytes of storage I would not otherwise have.

•AC•

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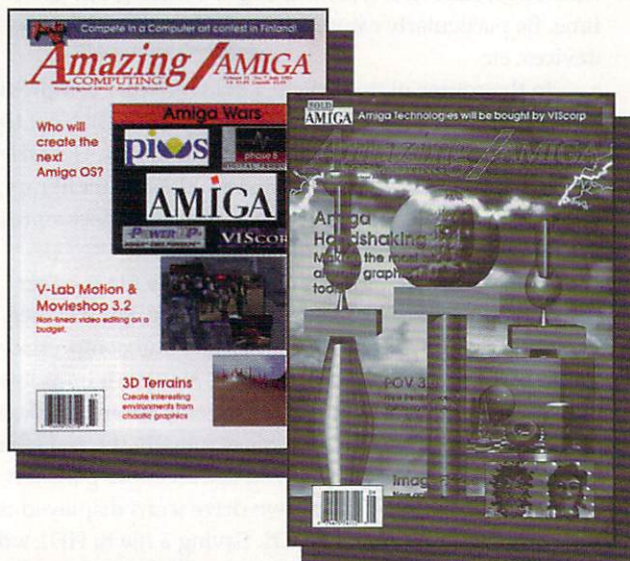
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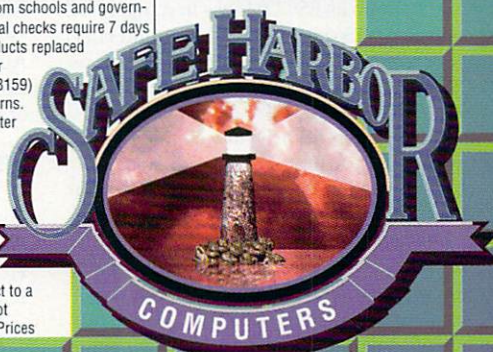
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The Amiga Sale #2



Undaunted by a perilous ESCOM bankruptcy, VISCORP executives flew to Germany, pulled Amiga Technologies from the grip of the ESCOM trustees, and clearly saved the Amiga platform from certain death.

By Don Hicks

Once again, as *Amazing Computing* is going to press, there are a variety of breaking news stories. One week after learning that the deal between ESCOM and VISCORP had been settled and would be signed as soon as it was reviewed by each company's Board of Directors, we learned that ESCOM was being placed into bankruptcy.

ESCOM's misfortunes are extremely bizarre. It appears that ESCOM's losses were refigured several times and, with each new computation, ESCOM losses were

VISCORP provided a press release to the financial community. The following was released on July 24, 1996.

VISCORP Gets Amiga

Chicago, IL July 24, 1996
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VISCORP Proceeds with Amiga Acquisition

On Thursday, the 18th of July, 1996, the final contract of purchase was signed between the bankruptcy trustee solicitor, Bernhard Hembach, and the president and CEO of VISCORP, William Buck, with

reached an agreement with the Trustee for the liquidation of these companies and with the creditors of these companies for the purchase of "Amiga." There were at least eleven different banks or companies that had claims to be "owners" of the technology and/or the inventory. ESCOM had liabilities of over \$250 million. Imagine the confusion...

2. The steps that we had to follow through the last three months were painstaking. As the situation at ESCOM deteriorated, we had to continually re-negotiate our purchase contract. We could not speed up the process. Many things we wanted to begin immediately we have had to delay. The situation at Amiga and ESCOM were extremely troubled. This was in part because of the difficult financial and management situations at Amiga and ESCOM, but also because of how poorly organized the intellectual property had been under Commodore. In the course of the Commodore bankruptcy many problems developed that were never repaired.
3. The final (and last of three) purchase contract was signed on Friday, 19 July. It cannot be changed; it has been executed. The intellectual property of the former Commodore and the inventory of the former Amiga Technologies will be owned finally by VISCORP. The final paperwork will be completed in the next 30 days. During this month, VISCORP GmbH will be registered and Amiga Technologies will continue to operate temporarily in bankruptcy for VISCORP.
4. Petro Tyschtschenko and his staff will continue to operate from Germany. Raquel Velasco and Petro Tyschtschenko will be the new General Managers of Amiga, to be known as

As the situation at Escom deteriorated, we had to continually re-negotiate our purchase contract. We could not speed-up the process.

Bill Buck, CEO, VISCORP

worse than the time before. Meaning that the figures reported early this year were inaccurate (even though those figures far exceeded the losses projected by the company to its investors in December of last year). In the end, the banks had no choice but to halt ESCOM and attempt to cover the escalating losses with its assets.

As soon as ESCOM was in danger, AC contacted VISCORP to see if this would effect the ongoing sale agreed to the week before. VISCORP executives told AC that the sale was still in progress, but that the ESCOM bankruptcy would probably stall the proceedings. After the year of financial chaos created with the Commodore buyout, this was one situation that would dismay and disappoint Amiga users.

However, on July 18 VISCORP was able to complete the deal and secure Amiga Technologies. Due to fair trading laws, no news of this event could be broadcast until

approval of the 'pool of banks' for the entire remaining inventory and intellectual property.

Until the 18th of August, 1996, VISCORP has time to establish the necessary companies to carry on with its current business. In the meantime, the business will be run with the approval of the bankruptcy trustee Hembach under the name AMIGA Technologies GmbH i.K. From the 19th of August, 1996, the business will finally be run under the name, control and ownership of VISCORP.

VISCORP's CEO On-Line

On the same day VISCORP CEO, Bill Buck, released the following open letter to the Amiga Community.

From Bill Buck, CEO, VISCORP:

1. Escom AG and Amiga Technologies GmbH are in bankruptcy and will cease to exist as corporate entities. VISCORP has

VIScorp GmbH. Al Duncan, a former General Manager of Commodore will join VIScorp to manage the sales and distribution of VIScorp and Amiga products in North America. Petro will continue to operate from Germany and manage the existing business. Raquel is looking for someone from the community to manage the re-organization of the sales and distribution in Europe. Please contact Raquel if you are the right person for this job.

5. The engineering efforts of the former Amiga Technologies and the on-going engineering of VIScorp will be combined and professionally managed. We intend to begin to implement the plans we outlined in Toulouse very shortly.
6. Please excuse our lack of communication with the community over the last months. We were severely restricted from communicating our activities. Please resend your emails to any of the VIScorp staff if they have not been answered by this letter. We simply could not answer all the emails.
7. Do not expect miracles from VIScorp, expect slow, but steady progress. Thank you for your continued support.

Best Regards,
Bill Buck

Behind The Story

As in almost everything, what we see in front of us is only a portion of the story. In exclusive interviews with both Amiga Technologies' Petro Tyschtschenko and VIScorp's Bill Buck, AC has been able to piece some of the story together.

Both men were contacted at their offices and were extremely interested in getting their information to the Amiga public. The conditions of the purchase had required that neither group could discuss the problems, delays, or expected conclusion of the sale until it was finished. Now that the announcement that the sale had been accomplished would be made within days of our contact, they could talk.

Petro Tyschtschenko

AC: Has the problem with ESCOM been a problem for VIScorp?

Petro: ESCOM AG went into bankruptcy. They first applied on the second of July for Chapter 11, but then on the 15th of July there was no chance anymore, no investors, and ESCOM went into bankruptcy. So all the other daughter companies, because of the legal situation, also went into bankruptcy. In other words, Amiga Technologies GmbH is now in bankruptcy.

But on the 21st of June, there was already a notary approved sales contract for the intellectual property of Amiga Technologies GmbH, for all the inventory, for patents, trademarks and whatever else was available to VIScorp. VIScorp wanted to proceed, but the situation was a little difficult because the properties of the

Amiga Technologies were not in one place. It was in ESCOM AG, it was in the United Kingdom under ESCOM, it was in Germany under Amiga Technologies. It was so complicated that VIScorp applied for a new contract.

VIScorp negotiated with the bank because most of the money that ESCOM owes is to the banks. VIScorp negotiated with the banks and VIScorp negotiated with the trustees. After a long round of negotiations, VIScorp was successful in making an agreement with the banks and the trustees to buy the whole essence, intellectual property, and the inventory from the liquidators, the trustees.

AC: OK. So once again you have survived.

Petro: Yes, I managed because I brought VIScorp in on the whole story and I don't know whether I should be proud or not, I'm really very tired of the whole thing. But I saved the Amiga a second time.

From the liquidators we have 30 days of transition time. In this 30 days we have to form the new company which will be

looking for partners who would like to have a license and the rights to produce the Walker board.

AC: What does this transformation do for advanced plans like the Power PC?

Petro: I really don't know to be honest because this will be discussed and coordinated by Mr. Al Duncan at VIScorp who previously worked for Commodore. He was recently in Germany and his project is to coordinate this with VIScorp. For sure we would like to improve our 3.1 OS, we would like to have at the Cologne Fair in mid-November 4.0.

AC: You are showing a new operating system in November, when do you think the actual release date will be?

Petro: We would like to have it at the Cologne fair, which is the biggest Amiga fair in the world. There are 70,000 attendees at this fair. The release in Europe and the US should be at the same time as the fair. But this will be coordinated by VIScorp. I will be making

Amiga wins because of the community. Amiga doesn't win because of VIScorp. Everybody has got to pull the rope in the same direction.

Bill Buck, CEO, VIScorp

VIScorp International or VIScorp GmbH or whatever.

Also in the US there will have to be a lot of restructuring of VIScorp to make it smart from the technical perspective. The deadline is exactly four weeks after the signing of the contract. VIScorp will start under the VIScorp name a worldwide business.

In the meanwhile, I will continue to run the business under Amiga Technologies GmbH in bankruptcy but all the sales and money that I am producing during this time belongs to VIScorp. This will be transferred on the 19th of August from the bank account of Amiga Technologies, to the bank account of VIScorp.

I will be the President of VIScorp GmbH in Germany, and I also saved some of the best people here and received a contract from VIScorp and most of them signed the contract. So we will continue our business in Europe and of course worldwide under the new mother company of VIScorp.

AC: Is the Walker a dead project?

Petro: I would not say that. I have a date in mid-August to go to Russia, to try and make a licensing agreement with a Russian factory to develop the boarding license.

AC: Meaning that they would produce it for the Russian consumers?

Petro: Yes. But this is only in the pipeline, it has not been negotiated so far. We are

licensing agreements in Europe focusing on this, my distribution, and sales. All the technical things, the development will be back in the US or under their control.

AC: You're moving all the development back to the states.

Petro: Right, because there are a lot of people like Carl Sassenrath whom I respect very much. He developed the operating system of the old Amiga, he was their engineer, and there are old Commodore people which VIScorp tells me they would like to mobilize.

AC: ESCOM went the way you said they would, they went out of business because of the PC, not because of the Amiga.

Petro: Right, not because of the Amiga. It is not my fault that we are in bankruptcy, because I could survive, I can generate sales. I am a small group with eleven people and I can survive on my own.

AC: Are the ESCOM stores closed?

Petro: The ESCOM affiliates are still open because it is a separate trustee handling this. They are selling out the product and generating cash for the trustee. My understanding is that there is a group interested in taking over the shops but I think there are a few different parties. I understand that they've already sold Czechoslovakia, Hungary is sold, and they are negotiating with somebody in the United Kingdom for the shops and the German shops to somebody else. So ESCOM will be divided up into small



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pieces being sold to different investors.

AC: Can you tell me who the large licensee in the US is?

Petro: Yes, my biggest licensee in the US is Advanced Technology in Seattle. They are using this (the Amiga) for medical products. I'm very optimistic about the future because as you remember in my speeches when I mentioned that my dream is that the Amiga will be in millions and millions of households as a TV set top box, for example. Maybe this dream can now come true because the technology is not only good for PCs, it is great for video and everything connected with the TV.

That's why I think we can have a great future. I am crossing my fingers and I am convinced that VIScorp is the best choice for this. They are all Commodore people and they are people who understand the technology. We need new products and if they are willing to license the technology to somebody who is willing to develop on their own a PowerPC then the Amiga PC is still surviving.

Bill Buck of VIScorp

On July 24, we were able to talk with VIScorp's CEO in preparation for his formal announcement about Amiga Technologies.

AC: Congratulations!

VIScorp: Well, you can't imagine what a disaster the situation was. We regret it took this long to have anything solid to say even though we had three different signed

agreements. When they went into bankruptcy we had to deal directly with the trustees and the nine different banks involved. Can you imagine how each one of those creditors wants something out of this, not to mention the insurance company and a few other creditors who will remain nameless.

It was a very very tense situation. I feel Raquel Velasco (V.P. of International Operations for VIScorp) and myself were negotiating in an ever changing situation.

AC: Was the bankruptcy caused by the investors or the creditors?

VIScorp: In Germany you have to go into bankruptcy for either of two reasons: your net asset volume value falls below zero or because your money going in is less than your money going out. That's it and boom, it happened.

We talked to ESCOM about two days before they went into an interim step to bankruptcy like Chapter 11, we were on a plane, we were there, we basically had one meeting and they went into bankruptcy that night. The next morning we met with ESCOM again, two days later we met with the trustee, and we had meetings with the banks over the next week, and after we had been there for three weeks we signed the agreement with the trustee. It's a great deal for VIScorp and we are even allowed to continue the Amiga in bankruptcy because we have to set up German companies and fulfill all the legal German

requirements to facilitate the transfer out of bankruptcy.

AC: So, you are Amiga Technologies at this point.

VIScorp: That's true.

AC: In one way it is a little early to ask you what your plans are but in another way you've had quite a bit of time to think about this.

VIScorp: Yes, we've had a lot of time to think and what we've realized is that I had built the company to do something, we had a plan and let's just go back to the plan. I told them I would be back and we could do this. Essentially it's the development, and let's stay focused.

We made our announcement about Emerson in June (on June 27, VIScorp announced they had granted Emerson the North and South American exclusive retail distribution and sales rights to VIScorp's interactive Internet television set-top device, the Universal Internet-Television Interface and the UIITI(R)-TV interactive "smart" television set which uses an enhanced Amiga+ operating system), we said a little bit in the market about that but we couldn't make any more announcements until we were done with the Amiga (sale) because a lot of the components we needed for that transaction were part of the Amiga transaction. It's the whole reason why we got into the Amiga deal in the first place.

What we are going to do is exactly what we said and that is to continue the Amiga computer, there is no doubt about it. The multimedia things we are going to do or come out with are the mainstay of the Amiga and Amiga community and make things that are already out there better.

I won't be specific about that yet, but let's say something like an accelerator board that will make things work in a better way. That's going to lead into the development of a new A4000, those are things that we can do pretty quickly.

Why are we doing that? Because we want the (Amiga) development community to have the tools they need to not only make stuff for the Amiga but to make stuff for the new Amiga too which happens to be not only a computer but also a set top box. In other words in the end, we don't care what people have, an Amiga computer or an Amiga set top box, what we care about is that they go to a publishing environment based on the Amiga OS that's distributed through Internet or some other kind of network which displays things on TV sets.

What we're talking about is an enhanced television and that is what we are giving licenses for in terms of Emerson and in terms of other stuff that we are working on. But all that was delayed because of the whole process we had to go through with the Amiga.

AC: You're talking about the advanced TV and you also said you're keeping the

Amiga platform itself because you need a publishing system if nothing else.

VIScorp: Right, unless we think there is a business in the computer market. Tell me where you can find a network computer for the performance and capabilities of the Amiga for the price.

But we didn't know all this stuff in the beginning. We were guys who were trying to go out and slay the world with a set top box and boom all of a sudden we had a chance to buy the Amiga, we didn't know what we were talking about. We had to sit down and try to make an analysis of whether there was an opportunity for us there that wasn't going to cannibalize what we had spent the last year and a half trying to develop. That was my biggest problem. It took us all this time to get into this position, I didn't want to destroy any opportunity. Some of the community has been really great but some of the community can't see the forest through the trees.

AC: Some of the community is very jaded. They have been through quite a bit.

VIScorp: Yes, but I'm not even talking about being jerked around. I'm talking about opening your eyes. This isn't about just selling the computer, this is about an entire publishing environment that works with 2 million PCs in the world. This is a whole different deal than just selling a computer. This is about a guy becoming a publisher and having a network that he can distribute his published materials through that is protected, secure and can make money.

It is really, really, really enormous. The thing about the Amiga is it's already wired into this whole community with the Video Toaster. We have a little VIScorp Amiga display in the media pavilion of the Olympics right now.

We haven't been able to do a lot because the deal wasn't finalized. We took a risk with the conference in France, but were afraid that if we didn't get out and say something quickly we were going to lose a lot of the community because we knew that they were frustrated and that ESCOM was having problems but we didn't know how bad it was going to be. We had no idea how bad the situation was.

ESCOM had not done anything with the intellectual property until the banks took it as a pledge against some of their loss. The banks were the ones that actually organized the process and that was just a few months ago. There were patents out all over the place that were going to expire.

We stopped all that and everything is okay again but that's what a disaster we had. The banks owned the intellectual property for Germany, ESCOM AG owned it for the rest of the world less what was sold to the Chinese. The inventory was partly owned by the banks, partly owned by creditors, and partly owned by the manufacturers. We had to

put it all back in the same basket again.

We think we will be working with companies such as phase5 and PIOS too. We're going to do what is best for Amiga and we think as we do that, we will do what is best for VIScorp and the only way to do that is to make sure the intellectual property is safe and not corrupted and not being fiddled with by people that should not be fiddling around with it.

People who want to be part of the process and help us build this thing, we'll have plenty of opportunities for lots of people and we're going to give them liberal access to that stuff.

AC: I know you don't have all the answers right now, but could we talk again in a few weeks?

VIScorp: Sure. We have done a lot of work already on new processor strategies. We figured out how to port this over with an almost off the shelf product with a little tweak to three different processors. So we really feel like we are going to blow this up a lot. It's going to be exciting. We have some old Commodore people and we'll have some personnel announcements in the next month that are going to rock the world. People are not going to believe the software people that are going to come blowing into VIScorp.

AC: If you could tell the Amiga community one thing, what would it be?

VIScorp: Amiga wins because of the community. Amiga doesn't win because of VIScorp. Everybody has got to pull the rope in the same direction. We don't think we're going to be passing up MS DOS anytime soon in terms of the installed base.

We think in the TV market everybody is at the same spot, the starting line. Because of the community and because of the way they are, because of what they believe in, and because of all the other stuff about Amiga, we believe we can win that race. If we win that race, that creates a lot of opportunity for people familiar with the Amiga system.

AC: What can Amazing Computing do to help you?

VIScorp: Tell us when we make a mistake or say the wrong thing. Help us find the right ideas. Help us talk to the right people, the people that are really committed to this thing.

We're a public company, we can create opportunities for people, financially, personally, professionally, strategically or the companies they are involved with. There's a big chance here. I don't want to sound too philosophical but for me this is freedom for people to access information through their television set. It's the really cheap computer that no one ever brought to the marketplace.

My objective is to set up a new kind of TV network. We distribute programs to people one user at a time. It's not a broadcast it's a narrowcast. Somebody has their interactive TV, they go online they

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get something they want to do, in the beginning it's a regular game that already exists.

As time goes on, you can take that, you can repurpose it for multiple users and you can have a guy playing another guy from Nottingham to Des Moines through the internet. Maybe it's a way for a little guy in Mississippi who couldn't buy a computer, but he can get a TV that costs around \$500.

AC: In conclusion, your understanding of the market is that you are going to keep everything in place now worldwide, right?

VIScorp: Absolutely. Well let's just say we are going to try to improve what is out there right now. Petro has done a good job in selling A1200s in Germany but we don't see anything else being sold in any large quantities in other places. So we are going to try and get that going a little bit better and we are going to try and improve the computer a little bit with new processors and other new options let's say. We're going to have an immediate solution for the A4000 and then we will have our own product.

Raquel will be responsible for reorganizing the Amiga efforts. She will be working with our engineering and financial staff here in the US to make that happen. She has international business credentials and we believe, as a European citizen, she is going to be helpful to VIScorp and the Amiga community.

Follow Up

In our conversation with Mr. Buck, we continually mentioned the need for feedback. If you have a suggestion, tip, or other communication, you can contact him: by mail at VIScorp, 111 North Canal St., Suite 933, Chicago, IL 60606, email (buck@vistv.com), or by FAX at 312.655.0910. Raquel Velasco can also be contacted at the above address or by email (raquel@vistv.com).

•AC•

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Volume 10, Number 11; November 1995

ShapeShifter 3.1, Find out whether or not the Macintosh and the Amiga can find peace at \$40, as the powerful shareware product permits the Amiga to run Mac software, by Marc Hoffman.

TrueBrilliance, Discover the secrets and fun of creating your own universe with Brilliance, and learn how to creatively produce a star background and populate it with your own heavenly bodies, by R. Shamms Mortier.

ChestNet, Can the Amiga be programmed to recognize disease and more from X-rays? Listen to the Amiga's favorite radiologist as he describes his specialized program, by Michael Tobin, M.D.

Online, A continued exploration of the Amiga on the Internet by discussing newsgroups and the advantage of telnet, by Rob Hays.

FinalCalc, Looking for a spreadsheet program for the Amiga? See if FinalCalc offers you a few new opportunities, by Merrill Callaway.

Family Connections, Turn those family stories and ancestral history into a genealogical database of your family. This specialized database should lead you on a merry climb through your family tree, reviewed by Shamms Mortier.

And Furthermore..., Ever wish you could design the Amiga of your dreams? Amiga artist, Dave Matthews has already created his. Take a look at his renderings and then apply your own artistic talents to the challenge.

Labyrinth, With outstanding graphics, and exceptional soundtrack, as well as a good story, some may think Labyrinth should be praised higher than its moist cousin, reviewed by Jason D'Aprile.



Volume 10, Number 12; December 1995

New Products & Other neat stuff, Amiga Technologies announces a new monitor, a modular screensaver called Aurora, XiPaint v3.2 and TurboCalc V2.1 from GTI GmbH, Nova Design's ImageFX 2.1 a upgrade, and much more!

Mand 2000: The Fires of Chaos, Mand 2000 is a newly released CD-ROM version of Cygnus Software's Mandelbrot-based fractal picture generating software, by Shamms Mortier.

Persistence of Vision Ray Tracer, Persistence of Vision Ray Tracer (POV) is a powerful 3D artist's tool capable of creating stunning imagery, and it's free! By Dave Matthews.

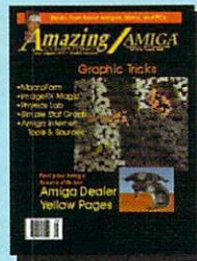
Directory OPUS V5.11, What possible improvements could have been put into this already best of all directory utilities? Find out who should and should not use this latest version, reviewed by Merrill Callaway.

Altering Photos in PhotoGenics, Tour some of the special effects of this image manipulation package and discover if you should add it to your other Amiga graphics tools, by Shamms Mortier.

Online, Explore how telnet can be used to augment the services available from your internet provider, by Rob Hays.

And Furthermore..., On Thursday, November 2, 1995, Petro Tyschtschenko, of Amiga Technologies, gave a speech in L.A., to a group of Amiga enthusiasts and journalists. Here's what he had to say.

3 Sci-fi 3D Animated Adventures, If you are a science-fiction fan, check out the following game titles: DarkSeed by Cyberdreams, Beneath a Steel Sky by Virgin, and Universe by Core Design, reviewed by Jason D'Aprile.



Volume 11, Number 1; January 1996

New Products & other neat stuff, Catch the latest CD collections with games, utilities, demos, samples, and other shareware items, a new video magazine on video, a new start-up Amiga developer and more.

MacroForm: Power Modeling in LightWave 3D, MacroForm makes your modeling life easier, because, with just a tap of one key, you can access modeling tools that are either new to LightWave or expand upon its creative options.

ImageFX Magic, Apply a little "White Magic" to some of your graphics and enjoy a world of difference, by Shamms Mortier.

Online, Travel the Internet with MUCK, MUD, and MUSEs while learning what to expect from main service providers, by Rob Hays.

Physics Lab in Mechanics, The Amiga has an educational reference on Physics that is a must for programmers, videographers, and students, by Shamms Mortier.

Welcome to My Studio: A Personal Studio Overview, Can four Amigas of various vintages find hope, happiness, and enrichment with a Pentium and a Power Mac? By Shamms Mortier.

Amiga Dealer Yellow Pages, Where have all the dealers gone? Check out this latest list of approved Amiga dealers from SMG, the new Amiga distributor for North America.

Simple Stat Graph, Statistics on the Amiga do not need to be hard or uninspiring with this detailed package by a one-man Amiga developer. By Shamms Mortier.



Volume 11, Number 2; February 1996

New Products & Other neat stuff, Amiga Technologies readies the release of the AMIGA Surfer for internet users, AT opens a new know-all web site, Tangent Music releases a special CD in honor of the Amiga, Persistence of Vision Ray Tracer is about to be released in version 3.0, and more.

Cinema 4D, Cinema 4D has landed on the American shores with a very deep and full-featured art and animation environment, reviewed by Shamms Mortier.

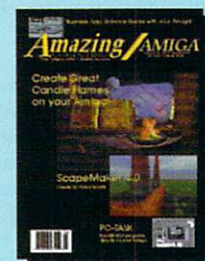
New FX in PageStream 3, Add new functions to PageStream with an array of new plug-in effects, reviewed by Shamms Mortier.

SnapMaps, Save time and effort as well as improve your images with plug-ins for your favorite graphics programs, reviewed by Shamms Mortier.

Moving from C to C++, Upgrade some of your best C programs to C++ with ease, reviewed by Randy Finch.

On-Line, AMosaic1.2, MUI, AmiTCP/IP, Mlink, ppp.device, and INTERINSTALL are all important Internet tools—discover what they are and where to find them, by Rob Hays.

New Amiga Web Site from Amiga Technologies, Connect directly with the Amiga team in Germany through AT's new internet address.



Volume 11, Number 3; March 1996

New Products & Other neat stuff, TelevEyes/Plus from CeV Design, a new Amiga SX, a CD-ROM just for A1200/A4000 owners, a CD-ROM of commercial titles, all Kara Fonts on one CD ROM, plus a new Web site from MegameM.

PC-TASK, A software utility to run PC software on an Amiga. The Amiga OS is still superior in numerous ways but we are still required to deal with the MSDOS computing community, reviewed by Marc Hoffman.

ScapeMaker 4.0, Combine the power of Digital Elevation Models from Vista Pro with the abilities of other programs to create your own 3D virtual worlds, reviewed by Shamms Mortier.

On-Line, Putting AMosaic to work on the World Wide Web, learning protocols, searching the hot new web sites, hints and tips,

and more in this month's column, by Rob Hays.

Creating Candle Flames with Imagemaster and Aladdin 4D, Imagemaster is a program that has a durable history of innovative image processing techniques.

Amiga in Business: Easy Ledgers, The debut of this new column features a review of an accounting package that would make any bean counter look twice.

North American Amiga Dealer List, Check the current list of Amiga specialists and dealers in this issue.

Personal Commentary: What Trees do they Plant? Shamm's Mortier asks us to do more than use our computers—make a difference.



VOLUME 11.4; APRIL 1996

New Products & Other neat stuff, New Productivity CDs, Specialized Speech Utilities, A New Amiga Game Company, and more.

Amiga Atlanta Inc., Amiga Atlanta Inc. celebrated its 10th anniversary with a celebrity banquet. Discover how this Amiga users group attracted attention from Amiga notables, television celebrities, and the Governor.

Creating Artwork with ImageFX, Alter your photographic images so they appear as if they were created by the hand of a master artist and not the camera, reviewed by Shamm's Mortier.

Cinema 4D Object Sculpting Techniques, Explore object sculpting and creation options, how they work, and the unique objects that they can provide, reviewed by Shamm's Mortier.

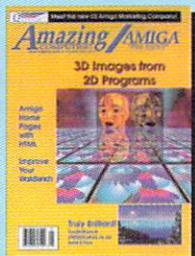
Web Typesetting Part 1: Introduction, Discover the tools available on other platforms and what you can do with your Amiga to begin creating Web pages on the Internet, by Randy Finch.

Termite 1.1, Has Oregon Research created the ultimate Amiga telecommunications program or have they just come close? by Rob Hays.

On-Line, Comparative shopping for the best on-line services with cautions, by Rob Hays.

Petro Tyschtschenko, ESCOM announces record losses. Amiga Technologies changes distribution structure. One man is in the center of all this activity to keep Amiga strong, spend and afternoon with AT's top exec.

Hot Amiga Web Sites, From Eric Schwartz's animations and graphics to web information guides, check out what other Amiga users are doing on the internet.



VOLUME 11.5; MAY 1996

New Products & Other neat stuff, Nova Design acquires Aladdin 4D, SoftTalk Programmer kit available, 'Professional' 3D glasses, and much more.

DPaint Tiled Backdrops, Creating 3D space in a 2D environment. Among its specialized features, DPaint has intuitive tools for creating perspective tiles. Learn how to utilize one of the hidden talents of the Amiga's well known paint program, by R. Shamm's Mortier.

A Truly Brilliant Idea! TrueBrilliance's capacity to address and incorporate ANIMbrushes gives it another plus as a tool for the creation of digital artwork on the Amiga, by R. Shamm's Mortier.

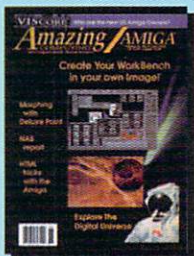
On-Line, Amiga multitasking advantages and three new Web programs: AmITCP/IP, IBrowse, and AWeb. Learn how to maximize the best feature of the Amiga while you are working on-line, by Rob Hays.

This Old Workbench Episode One, Tired of a lackluster performance from your current Amiga WorkBench? Try the techniques and programs in Dave's new series, by Dave Matthews.

Web Typesetting Part 2: Basics, Creating a Home Page with your Amiga requires a little knowledge of the intricacies of HTML, by Randy Finch.

An Interview with QuikPak's David Ziembicki, Amiga Technologies has selected a new sales organization for the Amiga in North America. Meet the person chiefly responsible for marketing the Amiga as well as developing future Amiga markets on these shores in this AC Exclusive.

Web Warning! The same Home Page can yield decidedly different results. Start creating a Web page with the Amiga that everyone will be able to read.



VOLUME 11.6; JUNE 1996

New Products & Other neat stuff, Amiga Internet Starter Package for Canada, Personal Paint for the Internet, new Sample Wrench Sound Editor, five new CD's from GTI GmbH, and more.

NAB '96, The National Association of Broadcasters held their annual event in Las Vegas, but the Amiga is slowly disappearing from the show floor, by Don Hicks.

Travel Through the Digital Universe, Learn about people, astronomy, spacecraft, astronomical terms, constellations and stars through this CAL (Computer Assisted Learning) program from SYZYGY Research and Technology, Ltd., by R. Shamm's Mortier.

DPaint Morphing, Although not as advanced or controllable as the high-priced morphing programs, DPaint offers Amiga users unique and exciting alternatives in their morphs, by R. Shamm's Mortier.

On-Line, Use client programs to bypass obstructions and ease your way on the Internet, as two shareware programs, Gui-FTP and WebMaker, are discussed, by Rob Hays.

This Old Workbench Episode Two, The Workbench as art: personalize your work area

with backdrops, icons, and menus. In this episode is covered the GUI aspects of Workbench renovation, by Dave Matthews.

VIScorp Buys Amiga Technologies, VIScorp is purchasing Amiga Technologies and will be working with Amiga interests all over the world. Read what the executives of this Chicago firm have had to say so far to the Amiga community.

Web Typesetting Part 3: More Basics, Your home page is only a few keystrokes away with these HTML code samples in your documents, by Randy Finch.



VOLUME 11.7; July 1996

New Products & Other neat stuff, GVP has a new home, Amicom introduces a new web installer, Blitz Basic is back, Paxtron has Amiga parts, Shamm's Mortier introduces Grafx Tidbits, and more.

Non-linear Video on a Budget: V-Lab Motion & Movieshop 3.2, Can't afford the high priced video systems for non-linear editing? The answer may be the V-Lab Motion and its new Movieshop 3.2 software, by John P. Jackman.

Fun with Lyapunovs, Create 3D environmental terrain models from the chaotic graphics of Lyapunov space. They are a class of fractal associated algorithms used to visualize a specific condition of fractal space, by R. Shamm's Mortier.

Amazing Symmetry, Textured tiles are extremely easy to create and offer the digital artist a few very interesting opportunities. This tool, embedded in DPaint, will help in your obsession to find newer and unique textures, by R. Shamm's Mortier.

On Line, Travel the internet with the newest Amiga browser, Voyager 1.0, and discover more excellent Amiga web sites, by Rob Hays.

JAZZ.BIT 96, Why is a major computer art competition held in Finland? An interview with Martin Keitel, the arts manager of JAZZ.BIT 96, interviewed by Marc R. Hoffman.

Amiga Wars, There is a battle for the Amiga user raging on the internet between old and new Amiga firms and a few others. For a system many have tried to write off, the Amiga is attracting a lot of interest.

Web Typesetting Part 4: Publishing & Tables, How to get your beautiful Home Page on the Web for the world to see. Also, delve into one of the most popular additions to the HTML 3.0 standard known as tables which allow data on a Web page to be structured in a row and column format.

#1

With Amazing, the
reader is always
number 1.

Make Do With What You Got

**In art or in life, it is not always
how much you have, but what
you do with it.**

by R. Shamms Mortier

This is a story about being creative, and also about not giving up. It's about using the tools at your disposal and pushing them to the limit. It all started when I received a letter from Bob Eckertt, an artist who lives in Niagara Falls, Canada. He picked up an out of date edition of Caligari, and wanted to know if Amazing could run some caligari specific tutorials. My response was that Caligari was so outdated at this point that running tutorials on it wouldn't benefit too many folks, so it couldn't be justified.

Bob, like most everyone else, exists on a limited budget, so upgrading to something else is not an option. Bob is not a novice when it comes to the creation of art. He has spent most of his life as an exhibit/wax museum designer, and produced a large number of wax images throughout the years. Physical problems forced him to change directions, and he decided to take his creative talent and energy and apply them to computer graphics through the Amiga.

Bob's Amiga creations are limited to sixteen color graphics and animations on his 030 Amiga 3000. He says, "I have

found that if a person learns and uses a few tricky methods, very pleasing results can be produced, even with a somewhat limited Amiga system".

Bob is working on a ten-minute video that he hopes will teach children some "street smarts" so necessary in today's world. Each narrated scene is introduced by an animated owl. He will supply the finished tapes to interested groups for the cost of the videotape alone. Also included will be a coloring book, created from black and white versions of the illustrations in the animations. He hopes to convince the Crayola company to kick in some crayons.

Another project Bob's planning is to design low-cost kiosks using the Amiga 500 as the multimedia engine. He has scrounged up three 500's so far, and is looking for extra chip RAM and monitors to complete the preparations (anyone out there with these parts, contact Mr. Eckertt at the phone number given at the end of the article).

Instead of relying on expensive touch screens, Bob's going to wire function keys to an illuminated keypad

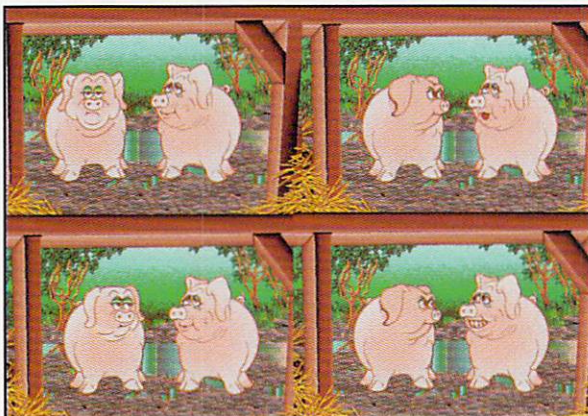


Figure 2. In these frames from a Brilliance animation, two pigs are captured in animated conversation.

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Figure 1. Bob's graphics make the best use possible of the Amiga 3000's capacities.

on the exterior cabinet. The numbered keys will correspond to numbered icons for the interactive presentations. If all goes well, he hopes to engender enough funds to purchase an Amiga 4000 to continue his animation work. He's looking forward to working in AGA modes in the future if the fates are willing.

Bob's artwork, at the moment, utilizes a vintage DigiView scanner and an Alpha Data hand scanner with which he scans in his pencil sketches. He has discovered dithering methods that create the illusion that he is working in many more colors than the sixteen he is really limited to.

Bob is a person that represents the best the Amiga community has to offer. Someone who is using his creative skills to help others, bypassing his own needs to give the best of himself. If you have some vintage Amiga equipment gathering dust in a corner, you might consider Mr. Eckertt's situation. I know he would appreciate hearing from you. His story teaches us a lot about what the creative experience is all about. He says his mother gave him the best advice possible, "make do with what you got". I really love Amiga people.

Contact: Bob Eckertt
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•AC•

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